City of Cambridge Open Space and Recreation Plan 2003 – 2008

Approved July, 2005 by the Massachusetts Department of Conservation Services

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### SECTION 1 PLAN SUMMARY

The residents, elected leaders, and staff of the City of Cambridge attempt to maintain a perspective on the past in an effort to plan effectively for the future. This document, the 2003 Cambridge Open Space and Recreation Plan, upholds this tradition. The early sections of the plan describe the city's current status as a dense, urbanized, employment and population center within the Boston metropolitan core. The historical processes that led to this current situation, as well as some of the details of its current population characteristics and development patterns are given. Land, water, and wildlife resources are inventoried.

This body of information is presented to offer readers a perspective on how the open space and recreation needs, goals, objectives, and planned actions of later sections were determined. These later sections include ideas for how to best plan for acquisition, management, natural resources conservation, and neighborhood-level improvements.

### SECTION 2 INTRODUCTION

## A. Statement of Purpose

Since developing its 1994 Open Space and Recreation Plan, Cambridge has invested a great deal of effort in enhancing the local environment. Efforts have focused on a wide-variety of environmental issues related to quality of life within an urban context. Environmentalism is not viewed as a distinct category of work, but is a consideration in many public improvement projects. Such integrated projects have included the development of a guiding Climate Protection Plan, the creation of a shuttle though public private partnerships connecting workers to transit, and the ongoing "green" rehabilitation of a municipal building.

In addition to such integrated environmental projects, the City has maintained a commitment to quality and equitable access to public land. Investment in the city's 77 parks and open spaces has continued at a high level, with projects involving greater community input, collaboration between departments, and innovative design. The City is currently in the process of redeveloping the 238 Broadway parcel into a park in a neighborhood identified as underserved by open space, and continues to look for new opportunities to add to its park inventory whenever possible.

The purpose of the 2003 Cambridge Open Space and Recreation Plan is to provide a framework that supports this ongoing work. More specifically, this plan serves to:

- 1) Update the 1994 Cambridge Open Space and Recreation Plan, highlighting major changes within the City;
- 2) Evaluate major planning initiatives in terms of their potential influence on the development of open space;
- 3) Review historical factors that influence contemporary planning;
- 4) Incorporate the City's recently developed Geographic Information Systems (GIS) technologies into the open space planning process;
- 5) Provide a common point of reference for the various City departments involved in the development of the City's natural areas and parks;
- 6) Provide Cambridge residents with a single source of information they can consult to learn

about major issues related to open space and recreation.

# B. Planning Process and Public Participation

The 2003 Cambridge Open Space and Recreation Plan is an attempt to synthesize many planning processes into a single document. During the nine years since it implemented the 1994 Cambridge Open Space and Recreation Plan, the City has sponsored numerous initiatives related to this topic, ranging from citywide processes to neighborhood studies to the redevelopment of specific sites. Section 6A of this document (Description of Process) describes some of the more noteworthy planning processes in detail.

All of these activities have involved a public participation component. The manner in which the public participated varied by process; at times, an appointed citizen committee was most appropriate, at others, one or more public meetings were utilized. In the case of the 2002 Open Space and Recreation Telephone Survey, an alternate technique was used to reach a broader base of residents than might attend public meetings. Therefore, while a public meeting was not held about this plan specifically, the information gathered from previous processes brings with it a strong element of community input.

This document was researched and prepared by staff within the Community Planning Division of the Community Development Department, using the 1994 plan as a framework. However, the many processes that inform this project were undertaken by a variety of City departments, including all of the divisions within the Community Development Department, the Human Services Department of Recreation, the Department of Public Works, the Water Department, and the City Manager's Office. The Cambridge City Council has also played an important role by supporting these endeavors.

#### SECTION 3 COMMUNITY SETTING

#### A. Regional Context

The City of Cambridge is located in Middlesex County in the Charles River Watershed (with that river forming its eastern border). Cambridge's neighbors include Boston on the south and east, Watertown and Belmont on the west, Arlington on the north and Somerville on the north and east.

The thirteen neighborhoods that make up Cambridge vary greatly in character, and include former industrial areas evolving into high-tech employment centers, multi-family residential neighborhoods, lively mixed-use squares, and the large natural area surrounding Fresh Pond. However, the overall feel of the city is that of a densely-populated, urbanized, inner-ring suburb.

The city has long served as a center of regional employment, first during the industrial age and more recently in the post-industrial, information-based economy. A variety of factors, including proximity to Boston, excellent transportation infrastructure, and well-known academic institutions have made Cambridge an attractive location to employers. This status as part of the inner-metropolitan center creates the challenge of providing high-quality services for residents and for others who come to the city to work, attend school, or visit.

Cambridge is not only linked to its neighbors in the region by the human-made institutions of transportation infrastructure, commerce, and education, but also by the natural green infrastructure that often goes unnoticed in an urban area. Perhaps the most significant part of

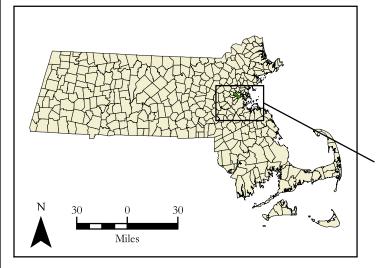
this green infrastructure is the Charles River, which makes its final stop in Cambridge and Boston before flowing into the ocean. While great strides have been made in improving water quality over the past several decades, at present the river is only suitable for boating, not swimming or fishing.

It is not only the towns along the Charles River itself, but also those within its larger aquifer that are linked by this shared resource. While many of the industrial and agricultural threats to river quality faced in the past have diminished, new patterns of development within the thirty-five communities of the aquifer create new threats to water quality. Thus, the lives of residents within the city stand to be impacted by development outside its borders. Likewise, in the northwest section of Cambridge, Alewife Reservation is threatened by activity in the larger Mystic Watershed.

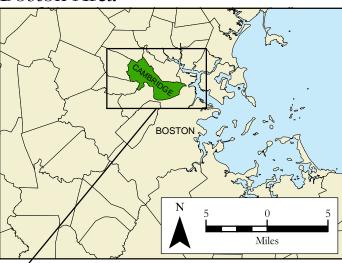
# Location Maps

Cambridge, Massachusetts

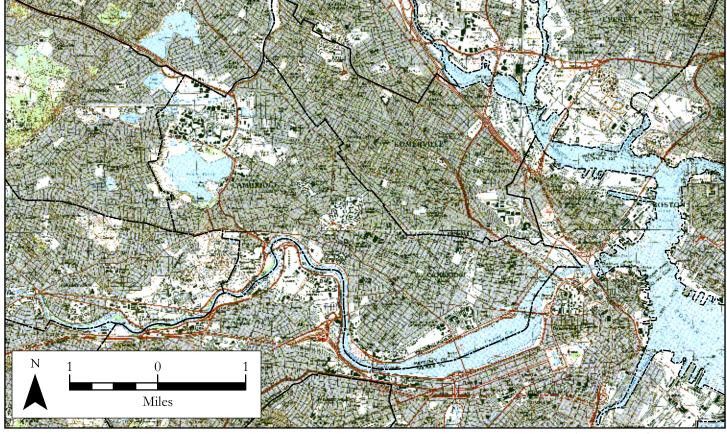
# Massachusetts



# Boston Area



# Cambridge



Source: USGS Topographic Quadrangle Maps from MassGIS.

# Open Space Plan

Community Development Department Cambridge, Massachusetts

# B. History of the Community

Prior to European settlement, the land that is now Cambridge was an important focal point for Native American activities, especially during the summer when it became a staging area for food gathering. The only surviving features from that time are several trails that have since become major transportation and commercial corridors throughout the city. One such trail, is today Massachusetts Avenue, from Harvard Square to Alewife Brook.

The first European settlement occurred in 1631 when the English came to what is now Harvard Square, and which was then the confluence of several major native trails. The new settlement, called Newtowne, was the capital of the Massachusetts Bay Colony.

The village at Harvard Square quickly established itself as the focal point for all economic, religious and civic activities in the new town. Settlers were not allowed to live outside the village, resulting in a small, nucleated settlement with house lots in town and fields beyond the village. In 1636 Newtowne lost its civic pre-eminence when the capital of the Massachusetts Bay Colony was relocated to Boston, now a town of substantial size. However, the village became the educational center of the colony when Harvard College was established there during the same year. The college located itself just to the north of the house lots. In honor of this new institution of higher learning, the village renamed itself Cambridge, after the esteemed college in England. The original street grid of the 1630's village and yard of Harvard College remain today.

Throughout the 17th and 18th centuries, the town's focus remained at Harvard Square. Drawn by the cache of Harvard College and the idyllic quaintness of village life, Boston's elite built summer houses along Brattle Street to the west of the Square. Elsewhere were scattered farms and an occasional tavern along a main road.

Not until the late 18th century did the focus of the town's activities began to shift outward from Harvard Square. The construction of the West Boston (Longfellow) Bridge in 1793 opened the town up to Boston real estate developers and manufacturing concerns. As a result, the beginnings of new villages in East Cambridge, Central Square and Cambridgeport emerged during the early years of the 19th century. Most notably, the developers of East Cambridge persuaded the Middlesex County government to move from Harvard Square to East Cambridge with the promise of a new courthouse. The county seat remains in East Cambridge today.

It was in these early years of the 19th century that Cambridge's enormous industrial history took root. Glassmaking established itself in East Cambridge, along with soapmaking and candlemaking; ropemaking and tanneries moved into Cambridgeport. Pipe organs were also manufactured in Cambridge.

Industrial growth climbed slowly during the first two decades of the century, as a consequence of the War of 1812. Then, in 1820, the economy took off. Soapmaking and candlemaking continued as the leading industries, followed by brickmaking in North and West Cambridge (Alewife) and glassmaking. Added to these was carriage manufacturing, including omnibus and modern railway carriages, supported by numerous lumberyards. Food processing and furniture industries were given their start during these years as expanding railroad facilities gave them access to regional and national markets. By mid-century, heavy industry, including boilermakers, engines, iron works, heavy machinery, presses and metal stamping took hold in Cambridge, boosted in part by the Civil War. Industry expanded from its small beginnings in

East Cambridge, Cambridgeport and Alewife to Kendall Square, lower Cambridgeport, parts of Riverside and North Cambridge. During the latter part of the 19th century refined sugar, candy, caskets, twine and netting, hosing, reinforced concrete, petroleum products and bitulithic pavement were added to the already long list of products manufactured in Cambridge.

Population growth closely followed the industrial boom. Between 1820 and 1830, the number of people living in Cambridge doubled. Between 1830 and 1870, population increased six-fold. Added to the Yankee stock were growing numbers of Irish, Polish, Italians, Portuguese and French-Canadians along with other ethnic and national groups. By 1865, 20 percent of the population was Irish-born with the total immigrant population making up about 28 percent of the city. Cambridge became a city in 1846, underscoring the dramatic demographic and industrial changes taking place at during the first half of the 19th century.

Residential growth raced to keep up with the burgeoning population. While Harvard Square retained its status as a quiet home for the intellectual and economic elite, dense new residential development for workers took place near the factories in East Cambridge and Cambridgeport, and near the brick yards in North Cambridge and west Cambridge. Little thought was given to open space. The Cambridge landscape was dramatically altered between (roughly) the 1850s and the 1930s as tidal marshes along the Charles, and freshwater marshes at Fresh Pond and Alewife, were filled. Filling at Alewife coincided with the industrial/commercial development of the area. Central Square, now on the street railroad line from Boston, began to take over as the commercial center of Cambridge, and eventually became the civic center when City Hall was built there in 1890. A comfortable middle class suburb developed north of Massachusetts Avenue between Central and Harvard Squares, and a more affluent suburb grew north of Harvard Square on Avon Hill.

This forward momentum of industrial, demographic and residential growth continued almost unabated into the 20th century. World War I gave a substantial boost to Cambridge's already robust industrial base. Added to this frenzy of these early decades was the relocation of the Massachusetts Institute of Technology to the Cambridgeport riverfront in 1916. In addition to establishing a second educational anchor to the city, MIT brought electronic, engineering, scientific instrument and industrial research firms to Cambridge.

Soon after the turn of the century, the population passed the 100,000 mark, reaching 104,839 by 1910. After 1910, however, the influx of new immigrants slowed due to the war in Europe. The situation changed at the end of the war when immigration picked up again. By 1915, the population of Cambridge reached almost 109,000 people, and by 1925, the population was 119,669, only 1,071 below the all time high of 120,740 in 1950.

The influx of residents during these first decades prompted more residential development to the point that the city became a series of interlocking street grids from east to west, leaving virtually no undeveloped land remaining, and no great expanses of open space. Today, the city's neighborhoods take their architectural character from the pre-1930 Cambridge. The extension of the subway to Harvard Square in 1912 and trolley lines up Massachusetts Avenue resulted in the construction of more apartment buildings along Massachusetts Avenue giving the city a more urban flair. The subway extension also allowed Harvard Square to regain some of its former stature as a commercial center, although Central Square was clearly thought of as "downtown".

Industrial growth in Cambridge peaked in 1929. The Great Depression took the edge off of industrial development in the city, as it did elsewhere in the country. In 1929, the value of

goods produced was \$175 million. By 1933, this value reached only \$97 million. The value of goods produced recovered somewhat by 1940, reaching \$129 million. World War II provided additional impetus for industrial growth, especially for heavy industry producing durable goods. The war also expanded the research role of the universities, particularly defense-related work at MIT. Subsequent advances in electronics and communications, including the development of radar, shaped the high technology industries of the next half-century.

The forward momentum of the economy was carried into the post war years. The chemical industry expanded, and the founding of Polaroid in Cambridge made the city notable in the field of photographic equipment. This recovery, however, was short lived, peaking in 1950. The 1950's brought about a sharp decline in the value, quantity and diversity of goods produced, as Cambridge fell victim to industrial competition from the suburbs, the South and foreign countries. One by one, both large and small manufacturers closed their doors forever, and the firms that remained employed fewer and fewer workers.

Population figures during the second quarter of the century reflected the highs and lows of the economy. In 1930, the population reached 113,643 people; however, by 1940, the number had dropped to 110,879. It rose again in 1950 to peak at 120,740 people, the largest number of people ever to live in the city. Paralleling industry, the first major out-migration of people occurred in the early 1950s as working and middle class families left the inner city for the suburbs. The family population expanded slightly in the late '50s, following the Korean War, but the overall population figure continued to drop.

In addition to changes in the sizes of the population at mid-century, the ethnic and racial composition of the city shifted as well. Industrial growth, particularly defense production, brought waves of black job seekers from the South. Portuguese-speaking people from the Azores, Cape Verde and occasionally Brazil continued to migrate to the eastern part of the city, joining extended family networks already in place. In contrast, many of those migrating out to the suburbs were of northern European descent, especially Irish.

In 1960, to counteract the loss of residents and businesses -- and the erosion of the tax base -- the city revised the zoning ordinance to permit higher densities and heights in both commercial and residential districts as a lure for drawing people back into Cambridge. In much the same philosophical vein, during the 1960s, much of Kendall Square was razed as part of the federal urban renewal program. Other industrial buildings across the city fell before the wrecker's ball or housed marginal uses; however, as firms moved away, the remaining industrial buildings were under utilized, contributing more and more to what was considered to be urban blight. A further blow to the city was the state's proposal to construct a six-lane expressway (the Innerbelt) cutting across the heart of the city, from Cambridgeport, through Central Square, across Neighborhood IV and Wellington-Harrington to Somerville. The state abandoned this plan in 1972 after much public opposition; however, much of the economic damage had already occurred, especially in Central Square.

Conversely, as the strength of industry diminished, both the physical size and economic prowess of MIT and Harvard University expanded. World War II expanded the research role of the universities, particularly in defense-related work at MIT. Subsequent advances in electronics and communications shaped the high technology industries of the decades following the war. The university research lab, and its technology-based "spinoff" firms, eventually superseded traditional manufacturing as the driving force of the Cambridge economy.

Enrollment at Harvard and MIT grew, fed in part by the demographic pressures of the "baby

boom" of the post-war years and foreign students seeking an American education. Expansion of ancillary and support services at the universities led them to become major employers in the city, and more and more commercial and retail operations, especially in Harvard Square, shifted their emphasis to serve the young student population. Meanwhile, the construction of new suburban shopping malls pulled clientele away from Central Square, adding to the disinvestment in the city's traditional downtown.

With the exception of the major universities, Cambridge continued to suffer from disinvestment and declining growth. In that depressed economic environment, the city began to search for a strategy to revitalize its economy and secure a tax base to ease the burden on homeowners and stem the decline of the city's financial health. These initiatives, which form the foundation for our planning assumptions today, are discussed in the next section, Growth and Development Patterns.

# C. Growth and Development Patterns

#### PATTERNS AND TRENDS

As noted in Section B, Community History, by the mid-1970s, the Kendall Square urban renewal area remained vacant, and the industrial areas of Cambridgeport, Alewife and East Cambridge continued to shed jobs and deteriorate. In response, the city undertook a comprehensive effort to revive these areas, in hopes of attracting federal aid, real estate developers, and, ultimately, employers for which an inner city location would prove desirable. Plans and policy document were produced for the East Cambridge Riverfront, Alewife, and later, Cambridgeport. Each plan recommended a specific mix of new uses, including commercial development and housing integrated into an overall urban design plan of which an integral and defining element was an extensive open space system. It was felt that new development could be contained best in these areas with the least disruption to existing residential neighborhoods. In addition to rebuilding the commercial tax base, these districts also offered the best opportunities to expand residential amenities, such as additional housing and open space, that could not be incorporated into the already densely and fully developed neighborhoods.

Accompanying these new planning initiatives was a change in public sentiment towards the scale of development; the new philosophy gave preference to lower densities, protection of the existing scale and pattern of development, stabilization of the housing stock, and preservation of the historical character and fabric of the neighborhoods and commercial districts. Starting in mid-1970s, both citizen-sponsored and city-sponsored rezoning petitions have nearly reversed, area by area, the increased density and development potential allowed under the landmark zoning revisions adopted in 1960. These rezonings occurred throughout the city, in residential, commercial and industrial areas and included design guidelines in specific areas, including Harvard Square, East Cambridge Riverfront and Alewife.

Additional special permit requirements, which expanded the role of the public in reviewing and shaping private development, were also added to the zoning ordinance during this time. Two of the most significant were provisions for Planned Unit Developments (PUDs) and for more contextually compatible townhouse development.

Another equally important land use evolution during this time was the special authority sought by Cambridge and granted by the legislature in 1979 to control institutional uses in lower density residential neighborhoods. The adoption of the Institutional Use Regulations in 1981

implemented the authorization in 1979.

The planning efforts begun nearly two decades ago began to bear fruit in the 1980s, with reinforcement from a heated real estate market. Development changed the face of once derelict areas, particularly Kendall Square and East Cambridge and, to a lesser extent, Cambridgeport and Alewife. Over eight million square feet were added to the commercial landscape, including offices, research facilities, hotels and light manufacturing. The East Cambridge riverfront, with its system of parks helping to weave the Galleria mall into the urban fabric, is especially successful. While the climate cooled considerably during the early 1990s, and many development projects were stalled due to financial difficulties, the economic boom of the late 1990s and early part of the new millennium saw another round of development in Cambridge. Both resident population and the number jobs in the city increased significantly. Despite the economic downturn that began in 2001, construction and permitting of new projects continues in Cambridge. Employers still find it an attractive place to locate, and its desirability as a place to live has made residential development extremely profitable.

The evolving industrial districts offer the best prospects for new development, including any significant new open space parcels, with the fewest conflicts and compromises. The districts and constituent lots are large by city standards, the use of the land is generally in flux, and it is possible to allow significant flexibility in the character of future development. The space in these districts in not unlimited, however, and meeting diverse demands requires careful planning and urban design framework to guide future physical changes with the maximum public benefit.

In 1991, the Community Development Department began to develop a growth policy to provide a framework for appropriately regulating development. The document that came out of this process, *Toward a Sustainable Future - Cambridge Growth Policy Document*, was approved by the City Council in 1993. It recommends that the city's current mix of urban form, scale, density and mix of uses is worth sustaining and enhancing, both in existing neighborhoods and commercial districts, and in the older industrial districts. Open space is addressed directly in the document; it is recognized as important in its own right and as a vital buffer among conflicting demands on urban land use.

The Growth Policy Document was used as a framework for the significant Citywide Rezoning of 2001. It also led to the more area-specific Eastern Cambridge Rezoning of 2001, and will be an important tool for the Community Development Department as it begins a study to address development in the Alewife area. The Planning Board and the Community Development Department also use this document as a decision-making tool not only in large rezonings but also for smaller, more specific projects.

While East Cambridge, Cambridgeport, and Alewife, continue to provide opportunities for development, perhaps the most significant new development is that proposed for North Point. This 37.1-acre area of the City, with 6.6 acres in Somerville and Boston, previously served as the home of railroad tracks and facilities. As many of these railroads become defunct, and the demand for residential and commercial development remains strong, two major landholders have begun the PUD process required before construction can begin. These two developments alone propose 2300-2700 units of housing. The amount of new residents that will live in North Point will create an entire new neighborhood. This area of the city is well served by transportation infrastructure, and stands to benefit by the creation of approximately 11-acres of open space. However, this level of development will create new challenges in providing

effective services and in assuring that appropriate infrastructure exists.

#### **INFRASTRUCTURE**

#### Transportation Systems

Cambridge is a city rich in transportation amenities. The Massachusetts Bay Transportation Authority (MBTA) operates both rail and bus service within the city. The Green Line has one stop in Cambridge (Lechmere), while the Red Line runs through the entire length of the City (with stops at Kendall/ MIT, Central Square, Harvard Square, Porter Square, Davis Square in Somerville, and Alewife). The Orange Line Station at Community College is also within walking distance for some in East Cambridge. There is also a commuter rail station in Porter Square with service to points west as far as Fitchburg. Numerous bus lines run throughout the city, including the recently implemented CT1 and CT2, cross-town busses that are part of the early phases of the MBTA's plan to create a more comprehensive urban-ring transit system. The City has also helped to create a public private partnership in order to sponsor the EZ Ride Shuttle, connecting Cambridgeport, Kendall Square, and North Station.

With regards to major roadways, Route 2 crosses Cambridge and is a major commuter corridor from the west to Boston. Likewise, Memorial Drive along the Charles River and Alewife Brook Parkway are part of the Massachusetts regional pleasure roadway network. Cambridge is a major access point to the Massachusetts Turnpike, although the highway is not located in city proper. The city also serves as a major truck route between the Massachusetts Turnpike and Interstates 93 and 95 north of Boston, as trucks are banned from the Turnpike Extension east of Cambridge.

The City, through its Environmental Program, is also actively encouraging other Transportation Demand Management (TDM) techniques including shuttle buses, car and van pools and bicycle use. The TDM Ordinance requires large employers to engage in planning and reporting in order to meet certain mode splits among their workforce. The goal of this program is to slow the rate of growth in traffic congestion within the city. The City also has a Traffic Calming Program, whereby physical design features are incorporated into roadway improvements that slow traffic and make streets safer for pedestrians and bicyclists. Bicycle and Pedestrian Committees give residents a voice in transportation planning.

One of the emerging processes that will affect the City's attitude toward automobile use is the Climate Protection Plan. This plan is being developed by a task force in order to determine how much greenhouse gas pollution is produced in the City, and discuss possible reduction measures. The draft plan recommends a target of a twenty percent reduction from 1990 levels. In order to reach this target, the following transportation actions will be required: a reduction in single-occupancy vehicle commuting, improved facilities for walking and biking, reduced motor vehicle travel with promotion and education programs, reduced motor vehicle emissions, and the promotion of transit improvements.

Probably the most significant challenge facing the City's transportation planners in upcoming years will be the development of North Point; while the area's new residents will have easy access to the Green and Orange Lines, any increase in vehicle traffic will stress the already overburdened O'Brien Highway and will increase traffic on local residential streets. One potential transportation benefit to the North Point development is the relocation and modernization of the Lechmere Station through a land swap. This will be a necessary step in the eventual implementation of the urban ring project, which could reduce the number of

commuters who feel the need to drive to work in Cambridge.

## Water Supply Systems

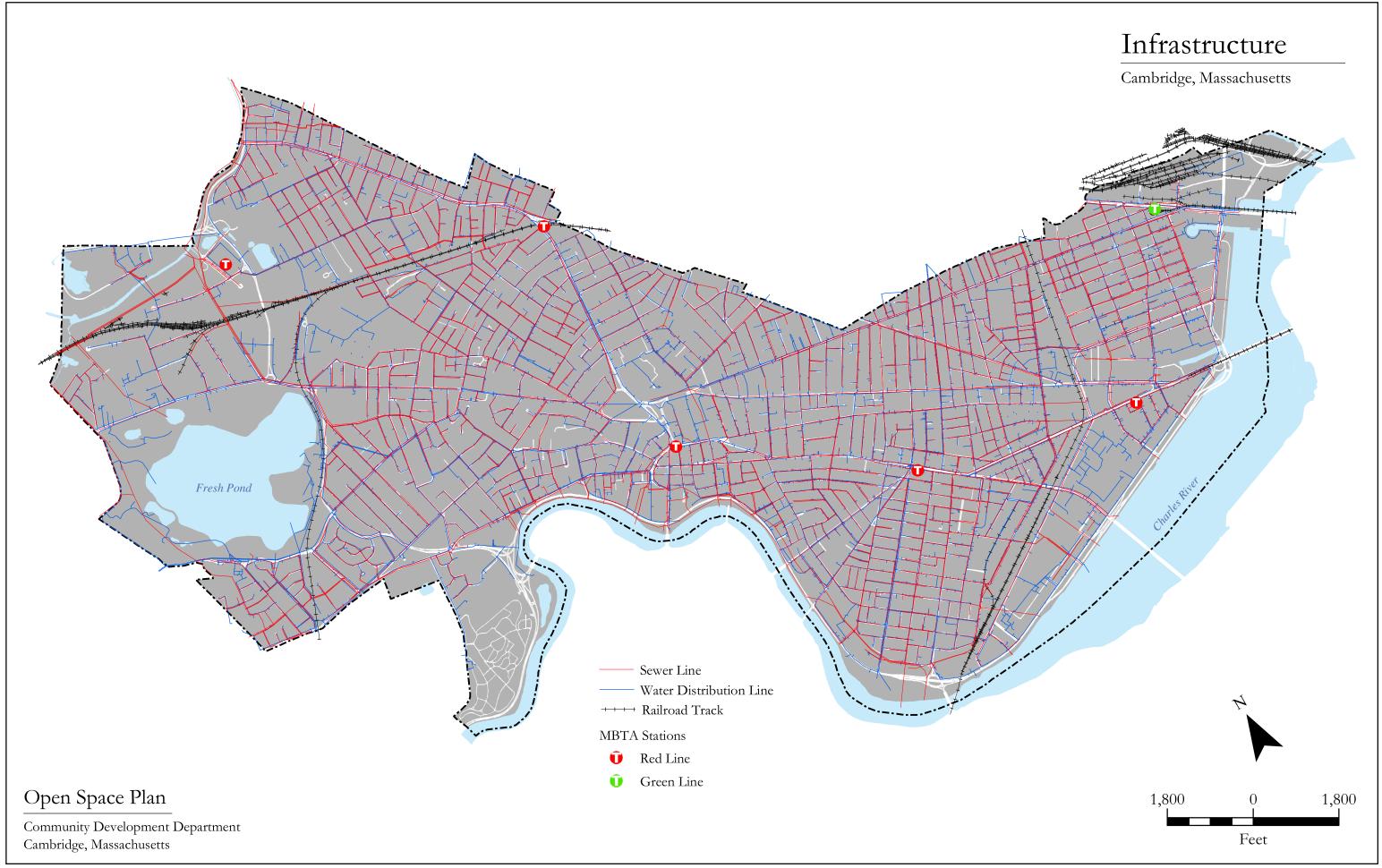
Cambridge has its own water supply, although the system is not located solely within the city's municipal boundaries. The main reservoirs, Stony Brook and Hobbs Brook, are located along Route 128 (Interstate 95) in the municipalities of Waltham, Lincoln, Lexington and Weston. Water is piped to Fresh Pond in Cambridge, treated, and then sent to the covered Payson Park Reservoir in Belmont for storage before use. The combined capacity of the up county reservoirs is 3,095 million gallons. Fresh Pond Reservation holds 1,308 million gallons and Payson Park can hold up to 32 million gallons. Given Cambridge's average daily demand of 14 million gallons, and assuming that rainfall remains sufficient, the City has a reliable system for the delivery of water.

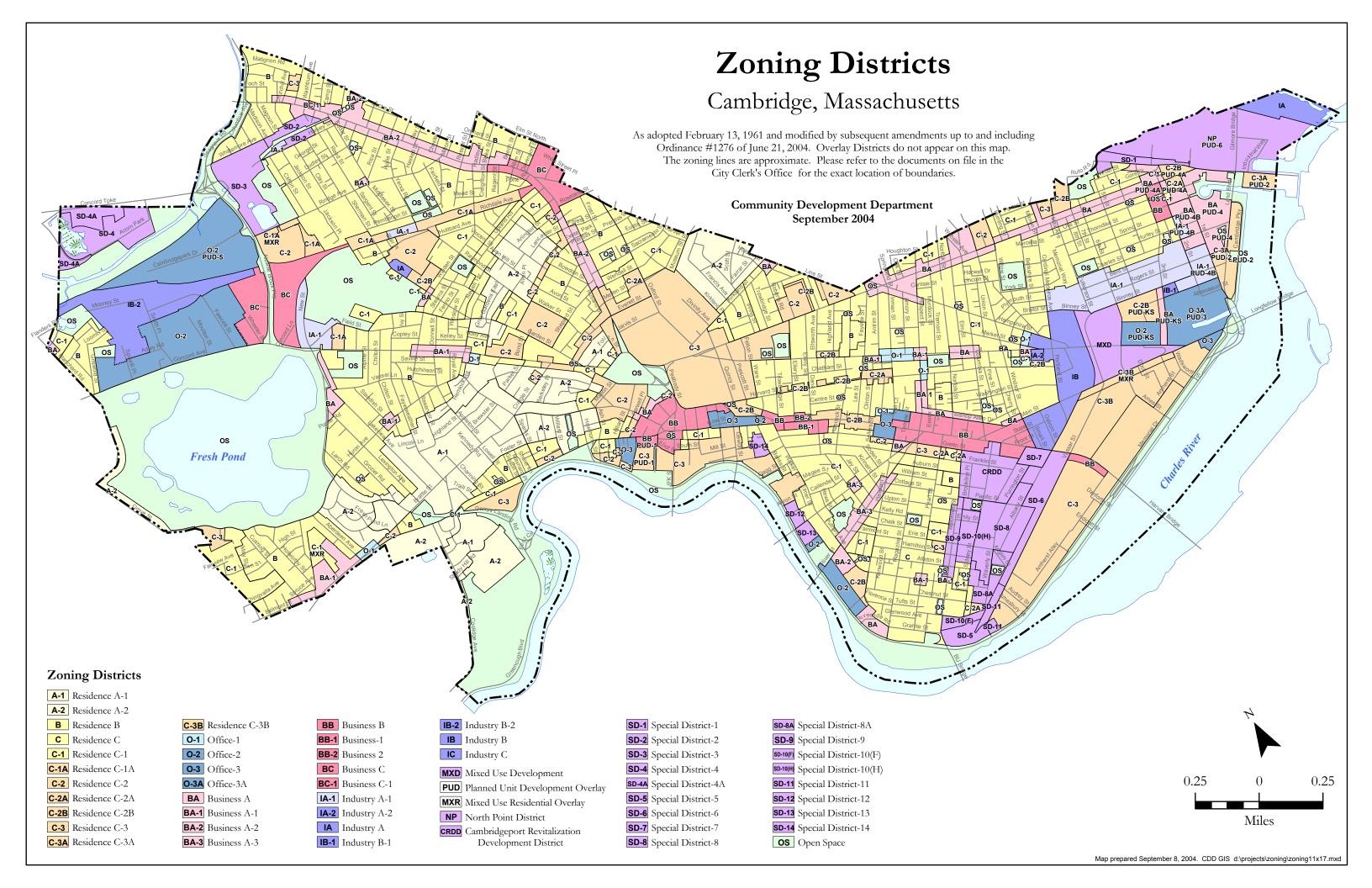
The most significant recent development in the Cambridge water system is the state-of-the-art water treatment facility. Between 1998 and March of 2001, the City relied on the Massachusetts Water Resources Authority (MWRA) water systems, while a new water treatment facility was being developed. This new facility ensures that Cambridge's water supply will be compliant with all current and future regulations for the foreseeable future.

#### Sewer Service

The city is part of the MWRA sewer system, which operates sewer-pumping stations at the eastern end of the city in North Point and in Cambridgeport at Cottage Farm (Magazine Beach.) These stations serve both the city and communities to the west of Cambridge and connect to the Deer Island treatment facility.

Between 1998 and 2002, the City of Cambridge Public Works Department made major capital improvements to the city's sewer system in order to bring wastewater discharges into Boston Harbor into compliance with federal and state pollution control requirements. This Sewer Separation and Stormwater Management Program was honored with the American Academy of Environmental Engineers (AAEE) Honor Award for Excellence in Environmental Engineering.





#### **LONG-TERM DEVELOPMENT PATTERNS**

The value of real estate in Cambridge makes continued development likely, at least for the foreseeable future. This development is expected to continue in all of the former industrial districts of the city (East Cambridge, Cambridgeport, and Alewife), and will be most striking in the formerly undeveloped area of North Point. This level of development can provide challenges to a municipality that hopes to preserve those aspects of community life its residents most value.

However, given recent amendments its zoning ordinance, the clear and coordinated nature of its PUD process, continued attention to Transportation Demand Management, and recent improvements to its infrastructure, Cambridge is in an excellent position to make development an asset to the community.

## D. Population Characteristics

Cambridge is a shifting mosaic of cultural and demographic diversity brought about by decades of immigrants seeking jobs in factories, as well as people from all over the world attracted to the many institutions of higher education in the region. Residents come from a wide range of age groups, races, and income levels. Effectively responding to the open space and recreational needs of such a diverse population is a significant challenge for the city.

#### POPULATION SIZE

The 2000 Census results state that the population of Cambridge is 101,355, a 5.8% increase since 1990. Previously, the population of the city had been in a steady decline since its peak in 1950 of 120,740. Long-term decline can be traced to out-migration, especially in the 1950s and 60s, and falling birth rates. Corresponding to state and national trends, families are smaller, fewer families are forming, and household size has declined. On the other hand, population growth in the past decade can be traced to new housing construction, new residents, and even better preparation on the part of the U. S. Census Bureau. The table below illustrates the population in Cambridge since 1940.

Cambridge: Total Population 1940-2000			
1940	1940 110,879		
1950	120,740		
1960	107,716		
1970	100,361		
1980	95,322		
1990	95,802		
2000	101,355		

Source: U. S. Census Bureau, 2000

#### POPULATION DENSITY

Open space and recreation issues are especially important for areas with high population densities. The population density in Cambridge is approximately 15,942 persons per square mile, which is high compared to both state and national levels.

#### HOUSEHOLD COMPOSITION AND SIZE

Households with or without children, single adults, and senior citizens all have quite different open space and recreational needs. People that reside in households that consist of children are more likely to utilize playgrounds and play areas designed for use by children. Families with young children may desire tot lots and small playgrounds while children that are a little older may use playing fields for both organized and pick up sports. Those from households that do not consist of children will probably desire different types of recreational opportunities, such as passive open spaces and facilities that are not specifically designed for children such as basketball or tennis courts and jogging and walking trails.

The US Census defines "family" as a householder plus one or more persons related to the householder by birth, marriage, or adoption. Compared with time past, fewer Cambridge households are composed of families. In 1950, nearly nine out of ten households lived as families; in 2000, less than 42% did (in contrast, two thirds (67%) of all households in Middlesex County consist of families). Just under 18% of Cambridge households have children, while people living alone occupy forty-one percent of all households and most of the remaining households are comprised of either "unrelated persons" (roommates or unmarried partners) or couples without children.

Household Composition in Cambridge, 2000

Household Type	<u>Number</u>	Percent
Couples with Children	4,835	11.3%
Couples w/out Children	7573	17.8%
Single Parent Families	2,668	6.3%
Other Family Households	2,519	5.9%
Total Family Households	17,595	41.3%
Families with Children	7,503	17.6%
Roommates	7,371	17.3%
Single Persons Alone	17,649	41.4%
Total Non-Family Households	25,020	58.7%
Total Household	42,615	100.0%

Source: U. S. Census Bureau, 2000

The number of persons per household in 2000 decreased slightly since 1990, from 2.08 to 2.03 persons per household. This is most likely due to the significant number of new housing units constructed during this period. Furthermore, decreasing household size in Cambridge has been a trend over the last few decades.

Household Size in Cambridge, 1950, 1990, 2000

	1950	1990	2000
Number of households	32,921	39,337	42,615
Persons per household	3.27	2.08	2.03

Source: U. S. Census Bureau, 2000

#### **LIFE STAGES**

Open space needs also vary in different stages of life. While all age groups need parks, green space and recreation, their levels of activity, access, and interest often differ widely.

The percentage of adults aged 20 and over rose slightly since 1990 in Cambridge. Similarly, the percentage of residents under 20 has decreased. This trend has been occurring since 1960 as the tables below show.

Age Structure in Cambridge, 1960 - 2000

Age	1960	1970	1980	1990	2000
0 - 4	9,251	5,919	3,834	4,759	4,125
5 – 14	13,810	10,760	8,120	6,704	7,266
15 - 19	9,440	9,705	9,033	7,469	7,438
20 - 34	28,811	37,005	40,770	37,542	41,292
35 - 64	33,787	25,272	22,692	29,257	31,952
65+	12,617	11,700	10,871	10,071	9,282
Total	107,716	100,361	95,322	95,802	101,355
	S	ource: U.S. Ce	nsus Bureau, 2	000	

Age Structure Percent of Population, 1960 - 2000

Age	1960	1970	1980	1990	2000
0 - 4	8.6%	5.9%	4.0%	5.0%	4.1%
5 - 14	12.8%	10.7%	8.5%	7.0%	7.2%
15 - 19	8.8%	9.7%	9.5%	7.8%	7.3%
20 - 34	26.7%	36.7%	42.8%	39.2%	40.7%
35 - 64	31.4%	25.2%	23.8%	30.5%	31.5%
65+	11.7%	11.7%	11.4%	10.5%	9.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: U. S. Census Bureau, 2000

#### **INCOMES AND POVERTY**

The income and poverty levels of residents in Cambridge can affect the level of access to open space and recreational activities. People with lower household incomes have a more difficult time accessing recreational opportunities that are not easily reached by means other than a private automobile. On the contrary, people with higher incomes are generally able to travel farther to get to open space and recreational facilities.

The median family income has risen 30 percent between 1980 and 1990 (\$31,943 to \$39,990 - all figures are in 1990 dollars,) while the median household income has risen 25 percent, from \$25,438 to \$33,140. Despite these increases, lower incomes and poverty are a continuing problem for many Cambridge families, particularly for non-white families and households. Among the 101 cities in the Boston metropolitan area, Cambridge ranked in the bottom ten percent in median family income. The table below indicates that household income levels vary sharply by race in Cambridge.

Household Income by Race in Cambridge, 1990

Race/Origin	'90 Mean Household Income
All Races	\$46,079
White	\$49,500
Black	\$29,053
Asian	\$35,217
Hispanic	\$32,409

Source: U.S. Census Bureau, 1990

Income Distribution: 1980 and 1990

	1980	<u>1990</u>
Low Income	46.0%	35.0%
Moderate Income	23.4%	18.5%
Middle Income	16.3%	20.8%
Upper Income	14.3%	25.7%

Source: U.S. Census Bureau, 1990

The map below shows that low and moderate-income residents are primarily concentrated in the city's eastern neighborhoods, and in parts of North Cambridge. These are also the city's most densely populated areas, and typically the most lacking in open spaces.

#### **EMPLOYMENT AND OPEN SPACE**

The nature of employment and the number of employees, especially non-Cambridge residents, are noteworthy factors regarding open space and recreation planning. In the past most employees in the city also lived in Cambridge. Today, four-fifths of employees in the city live elsewhere; therefore they may utilize open space and recreational facilities in notably different ways than residents.

Approximately 115,000 jobs exist in Cambridge, of which 12,000 (net) were created during the 1990s. Employment in Cambridge is primarily clustered along the city's main artery, Massachusetts Avenue, which links Harvard, MIT and North Cambridge, or in the once-industrial periphery of Cambridge (Alewife and the rail yards to the west and north, East Cambridge, North Point, Kendall Square and Cambridgeport to the east.) Each of these areas has undergone redevelopment to varying extent in the past two decades. Most new employment has been in office and research and development. As the city has steadily lost traditional manufacturing enterprises, in such areas as food, footwear, machine shops and

acoustical equipment, the former facilities of these industries have often been reused by service and research-oriented employers.

These trends are expected to continue, if at a more moderate pace, in the coming 10 to 15 years. New employment, whether through start up, expansion, or recruitment will be created primarily in technology-based fields such as through biotechnology and computer or internet related firms.

The Charles riverfront and the open spaces along the Massachusetts Avenue are popular noontime and after work outlets for jogging, walking, eating lunch, and sitting and talking. In addition, the presence of the university and college campuses (most notably Harvard and MIT) and the campus-like setting of certain companies provide significant passive and active recreational opportunities for employees in the city. Some of the workers in Cambridge also utilize the health clubs located throughout the city. Still, usage by employees can significantly strain open space and recreational resources in Cambridge.

### SECTION 4 ENVIRONMENTAL INVENTORY & ANALYSIS

# A. Geology, Soils and Topography

Cambridge lies entirely within the Boston Basin, a mostly flat, wedge-shaped lowland area sandwiched between hilly terrain and the Atlantic Ocean. Apart from the large-scale geological forces which created the Basin, Cambridge's terrain has been shaped primarily by glacial activity and, recently, by human activity.

Glacial action is responsible for some of Cambridge's most significant topographic features. As it is located within the Basin, Cambridge has no particularly high peaks. Most of the hills in the city are gentle hills, created either by glacial deposition or as a result of glacial outwash. Mt Auburn, for example, is called a "kame": it was formed as sediments collected either in a notch in the ice sheet or along its edge. The steep hill along a portion of the southern edge of Fresh Pond is an ice-contact slope, and was made in a similar way. The hill to the south of Fresh Pond that extends into Belmont and Watertown is called the Fresh Pond Moraine. A moraine is also a hill made of glacial deposits. And Fresh Pond is called a "kettle-hole", a pond created when a buried piece of glacier finally melts.

In western Cambridge, glacial action during the last Ice Ages had a dramatic impact on the terrain. Before the glaciation, a deep valley ran through western Cambridge, directly under present-day Fresh Pond. A river ran through this valley and joined the Charles. Glaciers, however, deposited material in this valley, filling it up to its current elevation. The existence of this valley is evidenced by borings in the Fresh Pond area. Bedrock is reached at 150 feet below sea level underneath Fresh Pond, indicating the bottom of the valley. Borings drilled at sites adjacent to this prehistoric valley reach bedrock at 50 feet or even less.

Throughout the Boston Basin, bedrock is rather deeply buried. In Cambridge, it is generally about 50 feet below the surface, rarely getting much closer; in some areas such as Fresh Pond, it is located considerably deeper. For most kinds of common (that is, small) construction projects, a deep bedrock layer poses no trouble. However, this geological feature is significant for planners of tall buildings, which usually must have foundations supported by bedrock.

Other geological features in Cambridge also may require the use of elaborate construction techniques. For example, Cambridge's flat topography is due not only to its location within the Boston Basin, but also to the fact that much, if not most, of Cambridge consists of fill areas.

All of the Charles River marshes, particularly in Cambridgeport and East Cambridge were filled, as was the Great Swamp surrounding Fresh Pond. While a flat topography may be convenient for construction, fill areas such as these create several potential problems due to structurally unstable deposits and clays and a high water table. Piles driven in these areas must be driven sufficiently deep, through layers of clay and weak organic deposits, in order to reach material upon which a foundation may be supported. While in some cases foundations of buildings of moderate size can be built on top of clays, larger buildings cannot, and piles must be driven all the way through to bedrock.

Another potential problem associated with filled marsh and swamp land is that groundwater lies between the fill layer and bedrock, making groundwater drawdown a concern. In the short-term, drawdown creates problems for construction crews trying to keep their work site dry. A more severe consequence of drawdown may result if a newly constructed building must resort to permanent dewatering to keep its basement dry. By continuously pumping groundwater, the water table in the area is lowered, exposing the support piles of nearby buildings. Exposure to air after prolonged immersion in water severely weakens the piles, undermining the stability of the building it supports. For this reason, Cambridge does not permit permanent dewatering. Potential problems of a high water table, such as the ones just mentioned, need to be considered in pre-construction phases of planning.

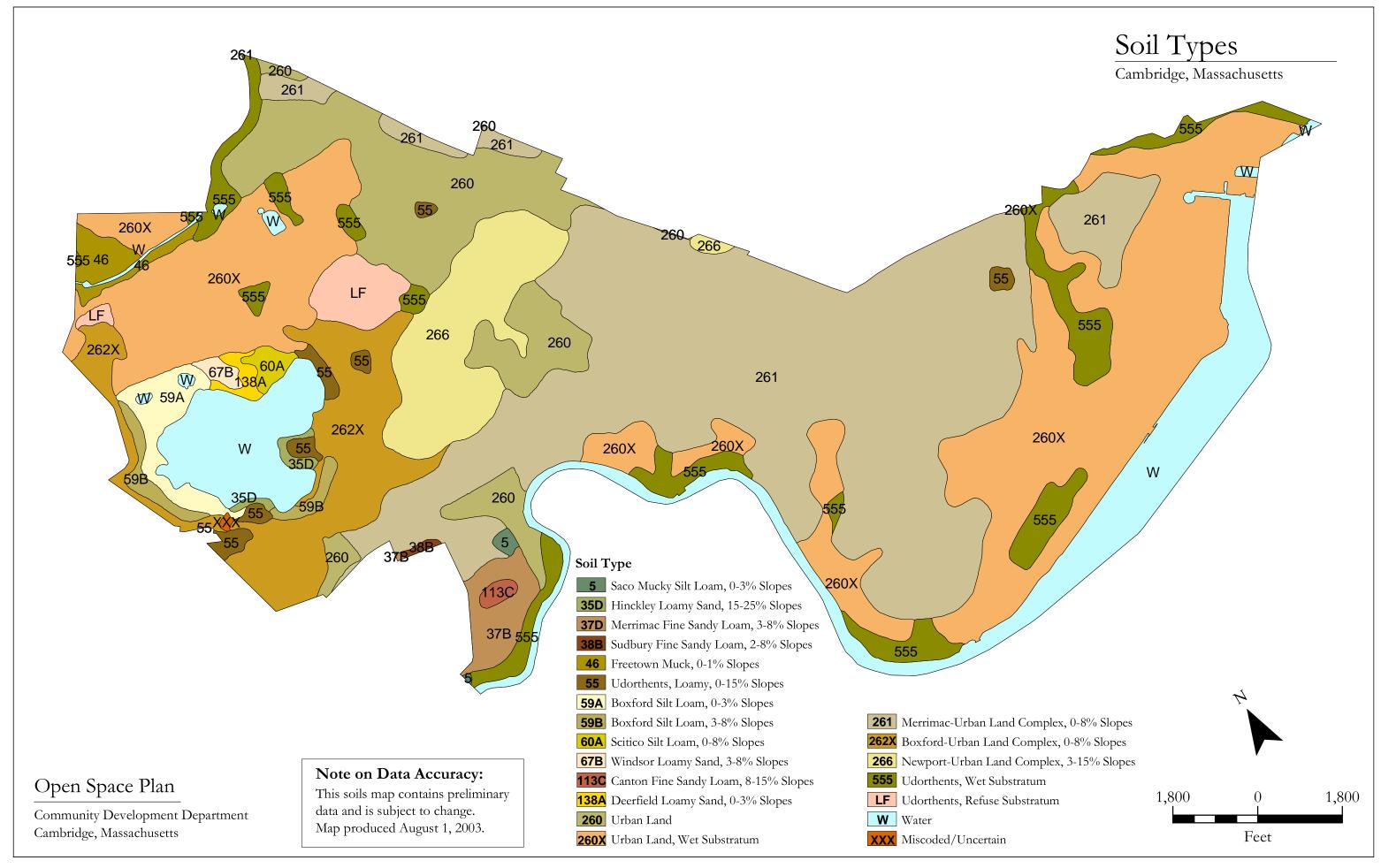
In the western parts of Cambridge, a layer of "sensitive clay" underlies the fill. The adjective "sensitive" refers to the peculiar nature of the clay: at first it appears to be stable, but becomes more like quicksand as it is disturbed. Around the turn of the century, the clay was mined extensively in what became the city dump. More recently, the MBTA encountered this material when building the Alewife extension to the Red Line. It forced them to use some unusual construction techniques to prevent the clay walls of the tunnel from collapsing.

According to the most recent U.S. Soil Conservation Service maps, the soil profile of Cambridge consists mostly of patches of Merrimac, Newport, and Scio soil types found mixed in with extensive "urban land" (parking lots, streets, etc.). Udorthents and urban land (disturbed, fill land) constitute the major soil types in the parts of East Cambridge and Cambridgeport that were created by filling in the Charles River and Millers River marshes. None of these soil types pose particularly difficult challenges for assuring proper drainage, especially since Cambridge is served by MWRA sewer connections; private septic systems, used in more rural areas, can only function properly in certain soils. However, siting ballfields and parks on Scio and especially Newport soils may require special construction techniques because of slow infiltration rates. Soils with slow infiltration rates drain water slowly because of the nature of their particles. Scio soils are characterized by a very fine sandy loam/silt loam surface over an only moderately permeable substratum. Newport soils have low permeability due to a silt loam surface covering a firm fine sandy loam with very slow permeability. Merrimac soils, on the other hand, are composed of surface sandy loam over a loose sand and gravel substratum with rapid permeability, and therefore have few developmental limitations.

The part of Cambridge with the most severe land use limitations based on soil type is the Alewife area, particularly around Little River. This area is characterized by a soil type called "Freetown muck", an aptly named soil consisting of highly decomposed organic material over sandy or loamy material. This muck is usually wet, has very low permeability, and is usually found in an area where the water table is very close to the surface. It exhibits low strength, and its severe limitations for building necessitate major increases in construction effort, design considerations, and intensive maintenance.

Since all buildings in Cambridge are serviced by MWRA sewer lines and by the Cambridge Water Department, soil characteristics suitable for septic systems or private water wells are not essential. Furthermore, most of the city, with the notable exception of the Alewife area, is situated on soils that drain quickly. The Alewife area, due to periodic flooding and the slow draining of its soils, does pose developmental problems.

The local geology does exert some influence over the height of buildings that may be reasonably planned. Tall buildings cannot be planned without considering the added cost of the special construction techniques required to overcome problems associated with fill land, deep bedrock, unstable clays, and a high water table. Paradoxically, however, these factors do not necessarily lead to a tendency toward shorter buildings. It's not difficult to imagine a sort of threshold building size at which economics become an important factor. Small buildings are relatively inexpensive to build since they require no special construction techniques. However, once a proposed building is planned to be tall enough to require the extra costs of special construction techniques (driving piles to bedrock, dewatering problems, etc) it becomes more economically sound to construct the tallest building that a given foundation, at a given cost, can support.



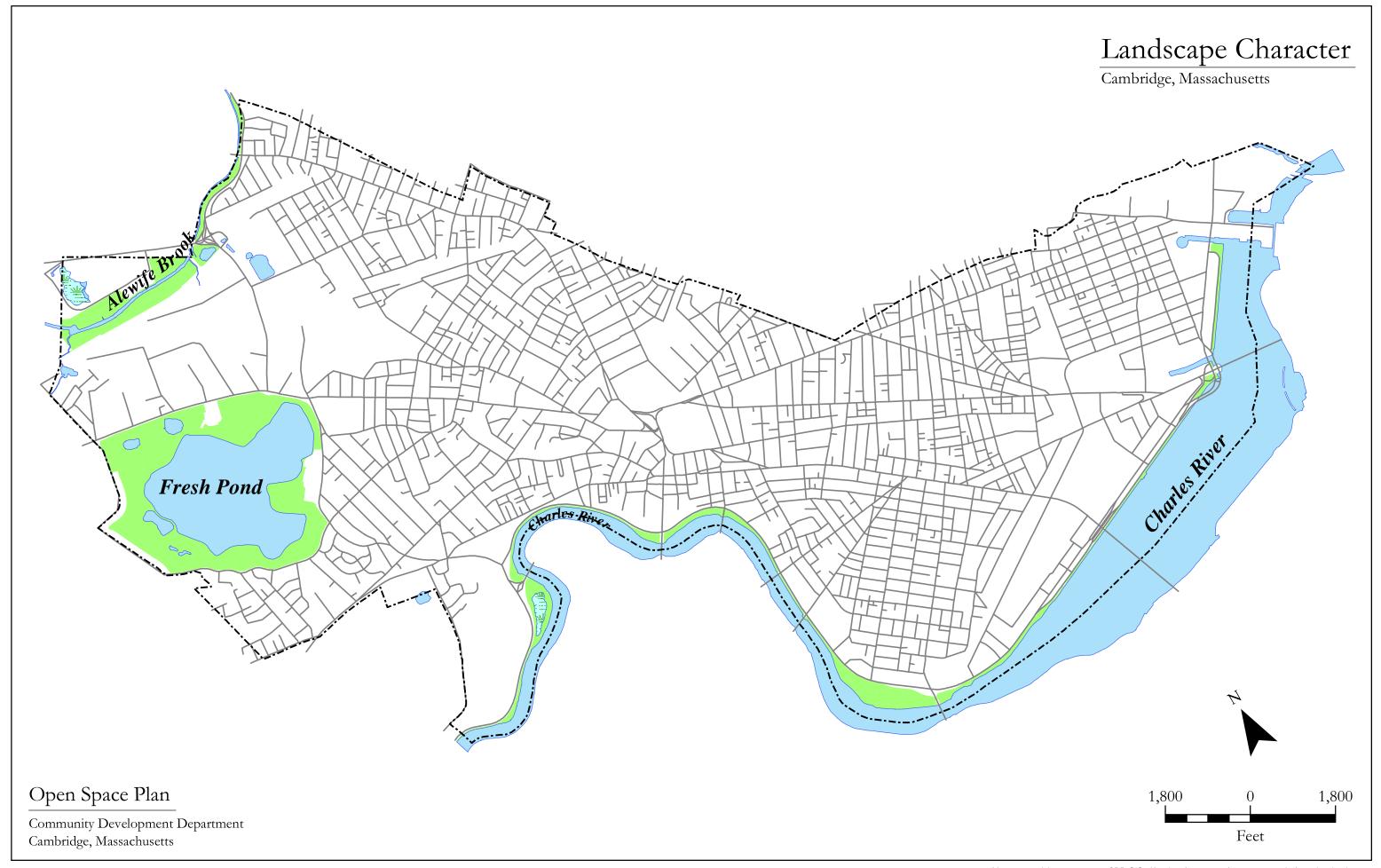
# B. Landscape Character

Cambridge derives it unique landscape character from a combination of its man-made environment, its natural surroundings and its multi-cultural population. As described in Section 3, Cambridge is a densely developed mosaic of different neighborhoods and land uses that have evolved over the past three and a half centuries. Thus, the city's areas of scenic interest are more deliberately contrived, or possibly historical in nature, rather than untouched natural areas.

Perhaps the premiere example of this is the Charles River Basin comprising 55 acres of parkland (passive and active) and a scenic drive along the riverfront. Built as part of a beautification and flood control project in the early decades of the 20th century, the riverfront provides expansive views of Beacon Hill and the Back Bay in Boston. The Massachusetts Department of Conservation and Recreation (DCR) manages the riverfront, and with the exception of a few boathouses, has not permitted any construction in this area leaving the shores of Charles accessible to the public.

The Fresh Pond Reservation, comprising the larger Fresh Pond and two smaller ponds (Little Fresh Pond and Black's Nook) lends special visual benefits to the city. Because it serves as a holding area for the city's water supply, Fresh Pond is not available for swimming, fishing or skating. However the Reservation offers one of the few heavily wooded areas in the city. Kingsley Point, despite its proximity to Fresh Pond Parkway, offers a remarkably quiet and tranquil view of the pond to the northwest and southwest. Other features of the Reservation include: a nine hole golf course; Lusitania Soccer Field, incorporating one regulation adult and one children's practice field; a two and a half mile jogging path; a small tot lot; a toboggan run; and hills for sledding and cross country skiing in the winter and picnicking in the summer.

The tract of fresh water wetlands at Alewife in the western section of the city is Cambridge's last remaining wilderness resource, yet its location amidst substantial residential and commercial development, highways, railroad tracks, and the Alewife MBTA Station reduces its visual appeal from these vantage points, and threatens its continued value as a natural resource. Nonetheless, considering this setting, a walk or a canoe ride through the Alewife Reservation offer views that are as remarkable as they are unexpected. Within the Reservation, the dense mix of wetland grasses and shrubs and floodplain trees block out surrounding uses and present idyllic views to the nature-lover.



#### C. Water Resources

Surface water: As part of the City's water supply, Fresh Pond is designated with the "A" classification, which does not permit active recreational use. Instead, Fresh Pond is enjoyed as an amenity enhancing the experience of recreational users of adjacent facilities (e.g. walkers, joggers and bicyclists on the perimeter path, golfers at the municipal golf course, early morning bird watchers and nature enthusiasts) at the Fresh Pond Reservation. Water-dependent recreational uses prevalent elsewhere in the City are restricted at Fresh Pond in order to preserve the water quality of the City's drinking water supply.

The Charles River, bordered by the Department of Conservation and Recreation's extensive riverfront parkland, is already used heavily for sailing, canoeing, and rowing. Its poor water quality as a result of urban runoff and periodic Combined Sewer Overflows does not permit swimming in this section of the River, although fish caught in the river are edible. The river's "B" classification reflects DEP's goal of making the river "fishable and swimmable".

The Alewife Brook/Little River system remains one of the state's most polluted waterways due to urban runoff and Combined Sewer Overflow discharges. While a Class B waterway, it is not currently support its designated fishing and swimming uses. However, the area does have value for secondary contact recreation, such as canoeing. The half-hour long canoe trip from Little Pond in Belmont to the Alewife MBTA Station, through the Alewife reservation, is an enjoyable ride offering surprisingly beautiful scenery. Culverts and bridges downstream of the MBTA station would require numerous portages should one try to canoe down to the Mystic River. Most of the Brook running along the Alewife Parkway shows signs of an artificial, ill-conceived, and ineffective flood control project replacing natural banks with concrete. The remaining wetlands in and beyond the Alewife Reservation provide valuable flood control, pollution attenuation and wildlife habitat functions. The fish population appears to consist of mainly non-native species, mostly carp, with little fishing value. It is hoped that through restoration efforts native fishes will return.

There are numerous small ponds in North Cambridge, including Blair Pond, Perch Pond, and Yates Pond in the DCR's Alewife Reservation; Black's Nook, the North Pond, and Little Fresh Pond at Fresh Pond Reservation; and Jerry's Pond, once a neighborhood swimming hole, now private property, and probably of poor water quality preventing swimming.

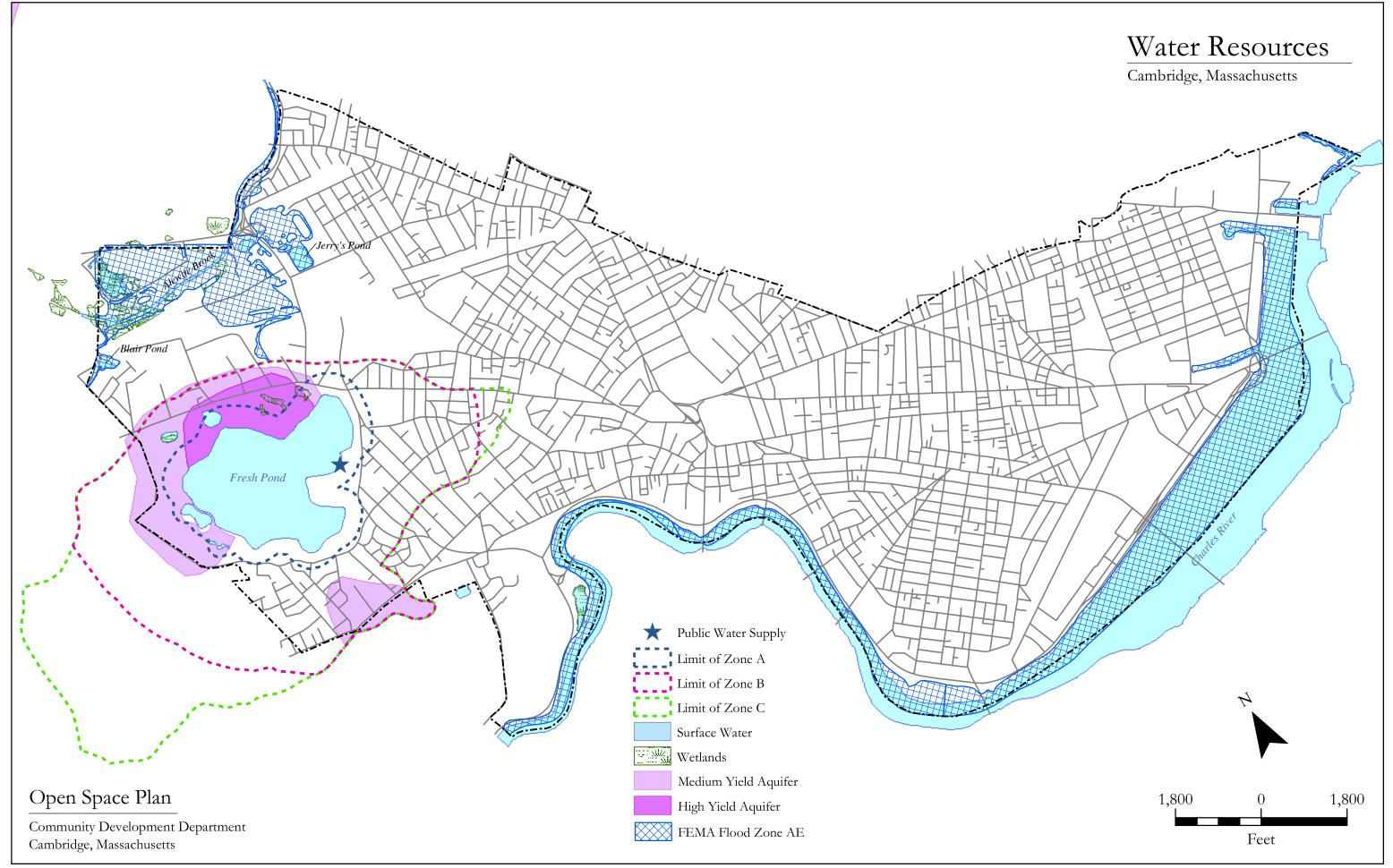
Located in the Alewife area, adjacent to the Cambridge Highlands neighborhood is the DCR's Blair Pond, which might be best described as an impoundment of Wellington Brook, and its water level fluctuates dramatically depending on the flow from Wellington Brook. At its deepest, Blair Pond might reach five feet in depth for a brief period after heavy precipitation. In periods of dry weather, most of the pond is less than a foot deep. Wellington Brook leaves Blair Pond through a culvert, then emerges to form the only remaining natural stream in Cambridge. Wellington Brook is not navigable. Yates Pond is at the eastern end of Alewife Reservation, partially blocked off from Alewife Brook by an access road from Route 2 to the Alewife MBTA Station; a small shallow connection exists between them, but is too small to canoe through. The waters of the Alewife Reservation support mostly carp, a species known for its tolerance of degraded waters with low oxygen content. A remnant anadromous fish run still migrates through Alewife Brook; however, only a few hundred blue back herring and alewife now spawn in Little Pond and the Alewife system.

The ponds at Fresh Pond Reservation are all relatively small and shallow. They are also either on, or immediately adjacent to the municipal golf course, and as a result are not safely accessible at all times. They attract fish and wildlife, and are especially critical to the nesting and migratory birds found at Fresh Pond.

Flood hazard areas: Problem flooding in Cambridge is confined to the Alewife Brook floodplain in Northwest Cambridge. There are three factors responsible for the severe flooding problems along Alewife Brook: 1) Development in the area has increased storm runoff into the Brook and decreased the amount of land available for floodwater retention; 2) Culverts along the Brook have reduced hydraulic capacity; 3) During particularly severe storms (50-year storms and worse), the Mystic River rises high enough to block the mouth of Alewife Brook, causing a reversal in the direction of flow. Clearly, further commercial, residential, or recreational activity in the Alewife area must be sensitive to the flooding problem.

Wetlands: Historically, wetlands covered a significant portion of Cambridge. East Cambridge and Cambridgeport were tidal marshes before they were filled and the Charles River dammed. Most of the city from Fresh Pond to Alewife Brook was also a predominately freshwater marsh which was under tidal influence through the Mystic River system. The wetlands in the Alewife Reservation are the remnants of these marshes. Apart from some privately-owned land in the Alewife area, nearly all wetlands in Cambridge are on publicly-owned land.

Aquifer recharge areas: There are no drinking water wells in Cambridge; the entire city is served by the Cambridge Water Department's distribution system. The quality of this water system has been actively addressed by the Water Department, especially through it's development of the new water treatment plant and the creation of a Fresh Pond Master Plan.



#### D. Vegetation

Given the densely developed nature of Cambridge, much of the vegetation is the result of deliberate landscaping efforts over time, namely street trees, city parks and university campuses. The few remaining undeveloped areas are notable exceptions to this.

Street trees are perhaps the most common of the public vegetation found in the city. This urban forest includes all public shade trees throughout the city; the Department of Public Works' Parks and Urban Forestry Division is responsible for its management. The City Arborist chooses trees that are indigenous to the area and can thrive with the soil conditions found in the city. Another criterion is their resistance to pollution. The inventory of street trees includes different varieties of sugar maples, locusts, ash and pears, along with sweet gum, horse chestnut, shadblow, London plane tree, sycamore maples and redwood. The city also has 84 American elm trees in its street tree inventory. Special programs sponsored by Urban Forestry Division related to trees include: Citywide Street Tree Pruning, Client Tree Program, Commemorative Tree Program, Significant Tree Program, Tree Removal and Pruning, Service Requests, and Volunteer Activities.

In most of the city's playgrounds and active parks, vegetation serves a secondary, though important, function. Criteria for choosing these plants also include hardiness and pollution resistance, along with their aesthetic qualities.

There are, however, a number of passive parks that have a number of species not commonly found in the city's open space inventory. Lechmere Canal Park and Charles Park are two areas in particular that contain unusual species. Lechmere Canal Park contains cork trees, witch hazel, summer sweet (elethra alnifolia) and shadblow (amelanchior.) Among the plantings at Charles Park are a hardy rubber tree, silver bell, two katsura trees, red bud, dawn redwood and kousa dogwood. Centanni Park features outstanding wisteria vines on trellises along with Japanese scholar trees (sophora japonica.) These plantings supplement the other trees, shrubs, bulbs, and flowers found in these parks. Mount Auburn Cemetery is nationally known for its inventory of species trees and shrubs. Likewise, the university campuses are areas offering distinctive landscapes and vegetation. Harvard Yard is noted for its stand of American elm trees along with other species.

Of the few remaining natural open areas, Fresh Pond and the Alewife Reservation are the largest and most important in Cambridge. The most popular wooded area in Cambridge is the Fresh Pond Reservation with its deciduous and evergreen forest. The woods are particularly dense along the north and south shores of the pond, buffering it from the surrounding activity and bestowing upon it a quiet pastoral quality. The Reservation is a popular place for jogging, walking, and nature-watching. The vegetation around the pond and in the Reservation's wetland areas contributes greatly to wildlife habitat value, which is particularly important for birds migrating in the spring and fall.

Fresh Pond Reservation is also home to the only known rare species in Cambridge. A botanist with the state Natural Heritage Program observed a population of <u>Cyperus engelmanni</u>, Engelmann's Umbrella-sedge, along the shore of Black's Nook in 1981. This plant is listed by the state as a Species of Special Concern. The current status of this population is not known, although as of October 1986, the Natural Heritage Program assumed it to be still present since they had observed it in other small ponds in the area. Engelmann's Umbrella-sedge is particularly susceptible to changes in water level in Black's Nook, as the plant occupies exposed sandy to peaty margins of the shore. No growth occurs in high water cycles, and seeds

will germinate only on suitable exposed shoreline.

Alewife Reservation is entirely within the 100-year floodplain of the Alewife Brook/Little River system, and is primarily made up of swamps and marshes. The common reed, <a href="Phragmites">Phragmites</a>, is the most abundant wetland plan here; the dominance of this non-native, aggressive species is another indication of the disturbed nature of this ecosystem. Most of the other plants at Alewife are either strictly wetlands species, or species that can tolerate wet soils.

#### E. Fisheries and Wildlife

Natural ecosystems, with full complements of animals and plants, require larger and less disturbed tracts of wilderness than exist in Cambridge. Nevertheless, there are three areas in Cambridge that do provide suitable habitat to fish, birds, and other animals: the Charles River, Fresh Pond Reservation, and the Alewife system.

#### The Charles River

The Charles River has been designated as a class B waterway, with the goal of making the river "fishable and swimmable". The Charles is the site of a significant alewife and blue-back herring anadromous fish run, in addition to smaller smelt and shad runs. The river and its inhabitants remain affected by Combined Sewer Overflow discharges, urban runoff, and upstream pollution, but conditions have improved in recent years and are expected to continue to improve. The DCR's Master Plan for the Charles River Basin will hopefully provide a blue-print for these improvements.

The only remaining wilderness area along the Cambridge portion of the Charles is the Hell's Half Acre, or Gerry's Landing, site, near the Watertown line. The potential wildlife habitat value of this area is high because of its variety of wetland types, dense vegetation, and proximity to the river. However, its small size and isolation from other wilderness areas has the effect of decreasing the wildlife activity here. Despite the paucity of species, this area has value as a nature-watching area. Red-winged blackbirds, for example, exhibit fascinating, yet easily observable, territorial behavior that even amateur bird watchers can enjoy. And the dense stands of berries that attract birds are delicious to the human palate as well.

In a show of support for the rehabilitation of the Charles River shoreline, the City entered into a joint management with the MDC (now DCR) to fund major renovations to Magazine Beach. This renovation will be carried out in phases, and will address the quality of the fields, shoreline, and overall landscaping. In exchange for funding these renovations, the City will receive priority scheduling for athletic fields.

#### Fresh Pond and Alewife Reservations

Most of the wildlife habitat in Cambridge is concentrated in northern and western Cambridge, around Fresh Pond and at the Alewife Reservation. The combination of open water, dense vegetation, and food fulfills habitat and food requirements of many birds. These areas are important stops along migratory routes for over one hundred bird species.

The variety of landscape features found in the Fresh Pond Reservation provide excellent wildlife habitat. While the ponds at the Reservation harbor muskrats, turtles, and frogs, and raccoons and skunks presumably inhabit its woods, Fresh Pond is most important for its support of numerous species of birds. The presence of several scattered ponds, dense brush, and forested areas in combination result in a complex topography that is well-suited to the feeding and nesting habits of a variety of bird species. The abundance of food items, such as

weeds, berries, and other vegetation, insects, and fish and amphibians, also adds to the importance of Fresh Pond as bird habitat.

Alewife Reservation provides a relatively large, contiguous stretch of potential habitat for wildlife. Ideally, the Reservation could support a diverse assemblage of birds and other animals, with the Little River running through it and several ponds (Blair and Perch Ponds in Cambridge; Little Pond in Belmont) and many acres of woodland and wetland within its limits. However, the poor condition of this habitat limits the types of animals within its boundaries. Hopefully the DCR's master planning effort for Alewife will improve this area.

#### F. Scenic Resources and Unique Environments

#### SCENIC LANDSCAPES

As described in Section 4 Part B, many of Cambridge's landscapes are mostly man-made and/or historical in nature, rather than untouched natural areas. Chief among these is the 55-acre Charles River Basin including the award winning East Cambridge Riverfront redevelopment area, the Massachusetts Institute of Technology campus, and the River Houses of Harvard University. Mount Auburn Cemetery (partly in Cambridge) was the first garden cemetery to open in the United States during the 1830s. Its winding paths and the extensive plantings of different species of trees and shrubs make it one of the most beautiful landscapes in the Boston metropolitan area. Hundreds of bird watchers go there, especially during the spring migrations.

Fresh Pond Reservation with its views from Kingsley Point (described in Section 4 Part B) provides one of the few unspoiled views in the city. Likewise, the interior of the Alewife district is another substantially unchanged area. The portion of Wellington Brook between Blair and Perch ponds is the last remaining natural stream in the city (please refer back to Section 4 Part B.)

The city protects its scenic resources through a variety of measures including an open space zoning district, several different historic preservation designations, and Conservation Commission review of wetlands and filled tidal areas.

#### CULTURAL AND HISTORIC AREAS

Cambridge has one of the most comprehensive historic preservation programs in the Commonwealth of Massachusetts. Because several of the city's open spaces have some historical associations, a number of them are protected through preservation measures. Of the several different designations the city uses, the most widely used is National Register status. Examples of open space protected through the National Register is the Charles River Basin, Fort Washington, Longfellow Park and portions of the Harvard University campus. Under the National Register, the State Historic Preservation Officer must approve any projects using federal funds to insure proper treatment of the properties. The city also uses local historic district and local landmark designations to provide additional protection to historical open spaces. Under these ordinances, no change can take place without the approval of the Cambridge Historical Commission. Cambridge open spaces with these designations include Fort Washington and the gates of Mount Auburn Cemetery respectively.

Mount Auburn Cemetery is protected, in large part, by its judiciously invested perpetual care fund. This privately owned cemetery has a continuous flow of funds necessary for the upkeep and enhancement of its historic grounds. In addition to its local landmark status, the Cemetery is a National Landmark.

Cambridge, with its interlocking villages, has a vast wealth of historic areas and sites each one with its own distinct character. Currently, the city has over 2,000 listings on the National Register of Historic Places (of which ten percent are individual listings and the remainder in districts,) two local historical districts and 13 local landmarks, and two neighborhood conservation districts. The neighborhood conservation districts are unique to Cambridge, authorized by a home rule petition passed by the state legislature in 1983. The sites and districts protected by these mechanisms tell the story of the city's history, including its industrial past, academic institutions, commercial centers, and array of different residential neighborhoods.

Cambridge was a summering location for Native Americans prior to European settlement and for some time afterwards. This along with the early 17th century European settlement indicates the possible existence of archeological sites. However, none have been registered with the Massachusetts Historical Commission, and the substantial amount of filling that has taken place along the Charles riverfront could mean that many sites have been destroyed in the course of the city's development.

#### STATE IDENTIFIED AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Because of the vast amount of industry in Cambridge in the 19th and 20th century, many of the nonresidential areas of the city require environmental analysis as a part of any redevelopment. However, there are a few areas within the city that are of special environmental concern.

Alewife District: The Alewife district consists of several hundred acres of sensitive ecological marshlands entirely within the 100 year floodplain of the Alewife Brook. It has suffered environmental degradation over time because of its industrial past (specialty steel, chemicals, and brickmaking) and, more recently, because of insensitive commercial development. It is also subject to urban storm water runoff from Cambridge, as well as from the neighboring towns of Belmont and Arlington. The Alewife Brook/Little River system remains one of the state's most polluted waterways, and currently does not support its designated uses of fishing and swimming.

The City's previous master plan for the area, entitled Alewife: A Plan for Sustainable Development (1995), proposed three goals to protect and upgrade the existing environmental resources, expand the open space network, and create a safer environment for people. At least one of the plan's recommendations—that the MDC (now DCR) develop a master plan for the Reservation—is currently being pursued. The Community Development Department is also in the process of beginning a new planning study for the Alewife area, to account for the changes that have taken place since the previous master plan was put forth.

Charles River: has a "B" classification; its poor water quality is a result of urban runoff and periodic combined sewer overflows. City's sewer separation effort and the Massachusetts Water Resources Authority Combined Sewer Overflow (CSO) improvements will help in achieving the Department of Environmental Protection's goal of making the river fishable and swimmable. However, significant non-point sources of pollution from Cambridge, Boston, and particularly from upstream communities, must be addressed to make further progress in restoring the Charles River.

#### G. Environmental Challenges

#### HAZARDOUS WASTE SITES

There are over 100 hazardous waste sites in the city, primarily in the nonresidential sections, and primarily due to industrial uses in the past. The Water Department and the Environmental Program have completed an inventory of the sites; the Water Department monitors the clean up of the sites near Fresh Pond.

#### LANDFILLS

There are currently no active landfills in Cambridge; however, the City had one landfill that was active from 1955 to 1970. It is now Danehy Park. Some other earlier landfills existed in what is today an industrial area within Alewife.

#### **EROSION**

See "Ground and surface water pollution", below.

#### **CHRONIC FLOODING**

Flooding continues to be a problem in North Cambridge due to inadequate flood storage of the Alewife Brook system. Development in this area has worsened this problem. (See "Flood hazard areas" in Water Resources section).

#### SEDIMENTATION

See "Ground and surface water pollution", below.

#### **DEVELOPMENT IMPACT**

Office development in the Alewife floodplain, combined with the area's past industrial uses, has increased storm water runoff and depleted the flood storage capacity of the system. In other evolving industrial areas, such as East Cambridge and Cambridgeport, the City is seeking to protect, and even repair, the environment through implementation of the Growth Policies in considering development plans, review, and zoning tools.

#### **GROUND AND SURFACE WATER POLLUTION**

During storms, the Charles River and Alewife Brook receive sewage discharges through Combined Sewer Overflows located along these rivers at several points in Cambridge. Measures already implemented by the MWRA have decreased the number of CSO events.

Non-point source pollution is now acknowledged to be a significant yet more intractable water pollution problem. Road and lawn runoff entering storm drains contain heavy metals and excess nutrients and cause sedimentation in the Charles and Alewife Brook. The problem is particularly severe in the Alewife Brook/Little River system. Blair Pond is fed by Wellington Brook, which flows through a culvert from Claypit Pond in Belmont. Over 75 percent of Belmont's storm water runoff enters Claypit Pond, and is therefore passed on to the Alewife system via Blair Pond. Blair Pond itself is undergoing human-caused eutrophication at a rapid pace. While natural eutrophication is a slow process whereby ponds may tend to fill in and eventually change into marshes, human-caused eutrophication proceeds at an unnaturally high rate due to contributions of sedimentation and pollutants from human activity. In the Little River and Alewife Brook, the lack of healthy aquatic vegetation that provides food and cover for fish and other animals, and the overabundance of carp in these waters, are among the signs

# SECTION 5 INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

Cambridge has about 492 acres of public recreational open space, most of which is located in the northern and western sections of the city. In addition, privately owned recreational facilities, primarily the property of educational institutions, are available on a limited and controlled basis to Cambridge residents. Of the 492 acres of public open space, approximately 40 percent are used for active recreation and the remainder is passive recreational space. According to the National Recreation and Park Association (NRPA) Standard of 10 acres per 1000 persons, Cambridge has only 40 percent of the recommended open space for a city of its size and population density. Though such standards are, of course, subjective and general, they can provide a general guideline for evaluating recreational open space needs.

The issue of the distribution of open space among the neighborhoods in Cambridge is at least as relevant as the issue of the shortage of open space in the entire city. Given the income and mobility restrictions of many Cambridge residents, the geographic distribution of recreational opportunities is an important concern. There is generally a satisfactory distribution of recreation resources across the city. Every neighborhood, with the exception of Neighborhood Two (predominantly university affiliated buildings), has some form of active recreational facility. Playgrounds are located in all 13 neighborhoods - some areas have as many as five. Baseball and/or softball fields are located in 11 of the 13 neighborhoods, and tennis courts are located in eight of 13 neighborhoods. However, several of the larger and more attractive open spaces are in the western part of the city. Neighborhoods in the eastern half of the city lack facilities of a similar size and character. At present, there appear to be few opportunities to correct this deficiency due to limits on both physical and financial resources.

Some of the larger city facilities in different neighborhoods such as playfields are utilized for organized activities including little league baseball, softball, soccer, and school sports leagues, and thus are unavailable for the exclusive use of neighborhood residents at times. Some of these spaces attract users from other neighborhoods simply by virtue of their size. The supply of several facilities - - specifically basketball courts and softball fields--is so limited that problems of overuse, scheduling conflicts, and general consumer dissatisfaction are inevitable. In addition, the recent surge in popularity of field hockey, lacrosse, and soccer, have made large field spaces all the more desirable.

#### A. Protected Parcels

The city safeguards portions of its open spaces with a variety of local, state and federal mechanisms, each with varying degrees of protection:

Land and Water Conservation Grant stipulations: These parks were either built or renovated with federal Land and Water Conservation Grant funds. Each grant agreement stipulates the protection of the open space for a certain period of time. The open spaces which utilized these grants include: Lechmere Canal Park, Front Park, Sennott Park, Harvard Street Tot-lot, Riverside Press Park, Columbia and Pine Street Playgrounds and Market Street Park.

*Open Space Zoning Designation:* As described in Section 4 Part F, the city has five open spaces with the open space zoning designation comprising over 492 acres. Under this zoning, only certain types of institutional uses may be built and most of these require a special permit.

Parks with this zoning include Alewife Reservation (115 acres), Danehy Park (50 acres), Fresh Pond Reservation (324 acres), the Marie Avenue Tot-lot (0.1 acre) in Mid Cambridge, and Gold Star Mothers (Gore Street) Park (3.6 acres) in East Cambridge. Under the city's zoning ordinance, it would take a two-thirds majority vote of the City Council to change the zoning designation or amend the zoning designation. While zoning does not offer complete or indefinite protection, it makes highly unlikely that these parklands would be converted to a non-open space use.

*Watershed Protection Areas:* In addition to its open space zoning designation, the Fresh Pond Reservation is part of the Cambridge watershed and thus protected from future redevelopment.

Local Historic District Designation: Under Chapter 40C of the Massachusetts General Laws, Cambridge has established two local historic districts, both of which contain significant open spaces. The Fort Washington Local Historic District in Cambridgeport was created by the City of Cambridge, with the specific intent of protecting this significant landmark. Longfellow Park and Craigie Fountain are located in the Old Cambridge Historic District. The City ordinances creating these districts require the approval of the Cambridge Historical Commission before any visible changes can be made. While this does not protect the parks entirely, given the 30-year history of the Cambridge Historical Commission, it is highly unlikely that the Commission will approve any proposals to remove these parcels from the open space inventory.

National Register Designation: The Cambridge Common, the Old Burying Ground, portions of the Harvard University campus, the Charles River Basin, Longfellow Park, Craigie Fountain, Winthrop Square Park, and Hastings Square all include some open space and are listed on the National Register of Historic Places. This designation means that the State Historic Preservation Officer, through the Section 106 Environmental Review process, must approve of any proposed changes, which use federal funds.

#### B. Private Parcels

The largest open spaces without full protection are the campuses of Harvard University and Massachusetts Institute of Technology (MIT). Both MIT and Harvard have significant real estate holdings in the city, much of which is not fully built out to its potential as allowed under current zoning. At the same time, the City is aware that excessive institutional expansion has the potential to be harmful to its tax base and the character of residential and commercial districts. The Growth Policy Document calls for each of the major institutions in the city to create long-range plans describing its future needs and goals and to discuss these plans with the city and the community.

#### **INSTITUTIONS**

Within the city, there are six institutions of higher education, the most notable of which are Harvard and MIT. In most categories of active recreational activities, the universities, jointly, have significantly more facilities than the city itself. With some exceptions, the active recreational sites have not been available to the general Cambridge community. Occasionally, summer events sponsored by the City take place at Harvard or MIT. The universities have also opened their facilities to different community organizations on a selected basis. Although institutional active recreational facilities are only accessible to the general public on a limited basis, they reduce the demand that university affiliated students, staff, and alumni would otherwise place on city owned facilities.

Universities in the city provide the Cambridge community with a number of open space and

leisure amenities. For the most part, the campuses are open to the public and are some of the most restful and beautiful passive green spaces in the city. Harvard Yard, with its combination of historic buildings and mature elm trees, is a landmark known worldwide. MIT has a significant amount of open space as well as modern sculptures placed around its campus.

In addition, there are nine museums, three theaters, and two observatories affiliated with educational institutions in Cambridge. These facilities are open to the public, usually at either no cost or for a minimal fee. The universities also sponsor a number of other cultural events involving performing arts, dance, music and theater.

#### **COMMERCIAL PARCELS**

Some open space and recreational facilities in the city are privately owned. Three hotels in the city, the Sonesta Hotel, Hyatt Regency Hotel, and the Charles Hotel, make their swimming pools and fitness facilities available to the general public for a fee. Abt Associates, located in Alewife, sells summer passes to its outdoor swimming pool at a more reasonable price to the public during the summer. There are also numerous fitness and health clubs located in the city. Memberships must be purchased to use the facilities and it is not known how many of the members are actually residents of the city of Cambridge.

In order to increase the amount of open space, the City of Cambridge recently added provisions to the municipal zoning ordinance that requires certain commercial developers to provide and maintain open space or passive recreational facilities, which are available to the public for most of the day. Some of the better known parks developed via this strategy are: The Riverfront Office Park in East Cambridge, which is an elevated, 27,000 square foot, landscaped plaza overlooking the Charles River; publicly accessible pathways on Lotus Development Company and Royal Sonesta Hotel properties; Sullivan Park in the Riverside neighborhood, a 12,000 square foot passive park with sitting areas, a tot lot and a community garden; and Charles Square in Harvard Square which provides about an acre of landscaped open space. Soon to be added to this inventory is 11-acres of open space in North Point (one large 5-acres park, and many smaller open spaces and pathways).

#### C. Non Profit Parcels

#### MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

The Department of Conservation and Recreation (DCR) owns two extensive tracts of open space in the city: the Charles River Basin and some adjacent land, and the Alewife Reservation. The land controlled by the DCR along the Charles River includes boathouses, playing fields for soccer and baseball, a playground, and an outdoor swimming pool. The grassy area and path adjacent to the river attracts people from all over the region to sit and relax, jog, walk, and cycle. The Charles River Basin is protected from harmful changes using federal funds through its National Register status, however the area does not have guaranteed protection from actions the state government may take. Alewife Reservation is a 115-acre natural area that includes marsh and wetlands, and small bodies of water. The reservation provides a habitat for a number of plant, bird, animal, and fish species. The area is also a resource for people to walk, canoe, and enjoy the unique natural environment. Alewife Reservation is not as frequently used as the Charles River Basin and Riverfront, but does attract visitors from outside of Cambridge.

#### NON PROFIT ORGANIZATIONS

Cambridge's other private nonprofit recreational facilities tend to be quite modest in scale. They usually either serve the local community or reflect the interests of the academic and professional community.

Three important recreational facilities are located in the Central Square area: the Cambridge Family YMCA, the Cambridge YWCA, and the Salvation Army. The YMCA is the largest private nonprofit recreational organization serving Cambridge residents. The organization's Central Square facility offers a wide range of recreational opportunities including an indoor swimming pool, rooftop track, health club and weight room, gym, and squash courts. The YMCA serves a large clientele that includes local youth and families, as well as people employed in the area. The YMCA has embarked on an extensive recruitment campaign and an active exploration of the options available to improve and substantially expand its physical plant.

The Cambridge YWCA is located in a much smaller facility with quite different programming. The current programming includes a weekend arts program for girls from seven to 14 years of age; an after school program for seventh and eighth grade girls which focuses on math and science; and a fitness workshop for women suffering from abuse. Folk dancing organizations also hold events there, which are open to the general public.

The Salvation Army is located in a relatively new and well maintained building which houses a gymnasium. The gymnasium is rented to community groups and specialized nonprofit schools in the city at modest rates

The East End House, Margaret Fuller Neighborhood House, and Cambridge Community Center are three local community agencies that provide modest recreational services to their respective neighborhoods. Both Margaret Fuller Neighborhood House and Cambridge Community Center have small, older tot-lots on their property. The Cambridge Community Center's gymnasium is sometimes made available to various groups. All of these centers also provide childcare, after school care, and serve as gathering places for residents in their respective communities.

Churches and private schools generally provide recreational services to their constituents with very limited benefits to adjacent neighborhoods. However, The Friends School, in Neighborhood 9, leases its field to the Cambridge Youth Soccer Association. Likewise, many neighborhood children use the Friends School's outdoor facilities when the school is not in session.

#### D. Public Parcels

#### MAJOR FACILITIES

A few recreational facilities dominate the total land area of Cambridge's public open space system: Fresh Pond Reservation, Danehy Park, the Charles Riverfront, and Lechmere Canal Park. All of these sites include active and passive recreational open space. Fresh Pond Reservation, Danehy Park and Lechmere Canal Park are under the authority of the City of Cambridge. The Charles Riverfront is under the authority of the Department of Conservation and Recreation (DCR).

Fresh Pond Reservation is a unique and valuable resource comprised of the Fresh Pond Reservoir and 155 acres of playing fields, grassy open space, a golf course, and wooded areas.

The 166-acre Pond itself adds a sense of spaciousness far beyond what the land area itself suggests. In addition to passive recreation, it provides opportunities for active uses including jogging, bicycling, soccer and golf.

Danehy Park is comprised of 50 acres of open space and playing fields in the western part of the city. The site of the city's former landfill, the area has been reclaimed to provide for a variety of organized and informal sports activities including softball, soccer and football. In addition, the park has tot lots, a jogging path and passive sitting areas.

The Charles Riverfront, like Fresh Pond, provides a visual amenity to the city, creating a wide path of visual openness along six miles of Cambridge shoreline. In addition, the Riverfront provides opportunities for boating, jogging and bicycling. The Department of Conservation and Recreation controls the playing fields and access to the boathouses.

Lechmere Canal Park is located adjacent to the Charles River along the eastern edge of the city and provides a unique mix of recreational activities on 7.5 acres along the Lechmere Canal. The park, situated in the midst of a mixed-use complex with retail, office and housing, offers opportunities for boating, jogging, outdoor concerts and events, picnicking, or passive enjoyment. This facility is linked to several smaller passive recreational sites in the area and to the Charles Riverfront.

Also worth noting is the War Memorial Recreational Facility adjacent to Cambridge Rindge and Latin High School used by the high school for physical education classes and after school sports programs. When school is not in session the facility is also available for use by the public for a relatively small fee. The facility includes: regulation-size indoor swimming pool and locker facilities, a weight room, indoor field house and track, four lighted outdoor tennis courts, a passive park and tot-lot.

#### **OTHER PARKS**

The remaining public open space inventory, in approximately 100 locations, is scattered throughout Cambridge in predominantly small facilities. Forty-one sites are less than one acre in size and only eight are larger than five acres. The pattern of dispersal of facilities offers reasonable accessibility to at least some types of open space resources for most Cantabrigians (though there are some significant exceptions). However, improvements could be made in nearly every specific type of park and recreational facility to bring the city closer to NRPA standards.

Public Open Space in Cambridge

	PARK NAME	LOCATION	USE	SIZE (acres)
1	Agassiz/Alden Park (Baldwin School)	Oxford St.	Playground	0.1
2	Ahern Field (Kennedy/Longfellow School)	Charles St.	Basketball, Indoor Center, Running Track, Softball, Soccer, Street Hockey	2.6
3	Alberico Park	Pleasant St.	Basketball, Playground	0.5
4	Anderson Courts	Pemberton St.	Tennis	1.6

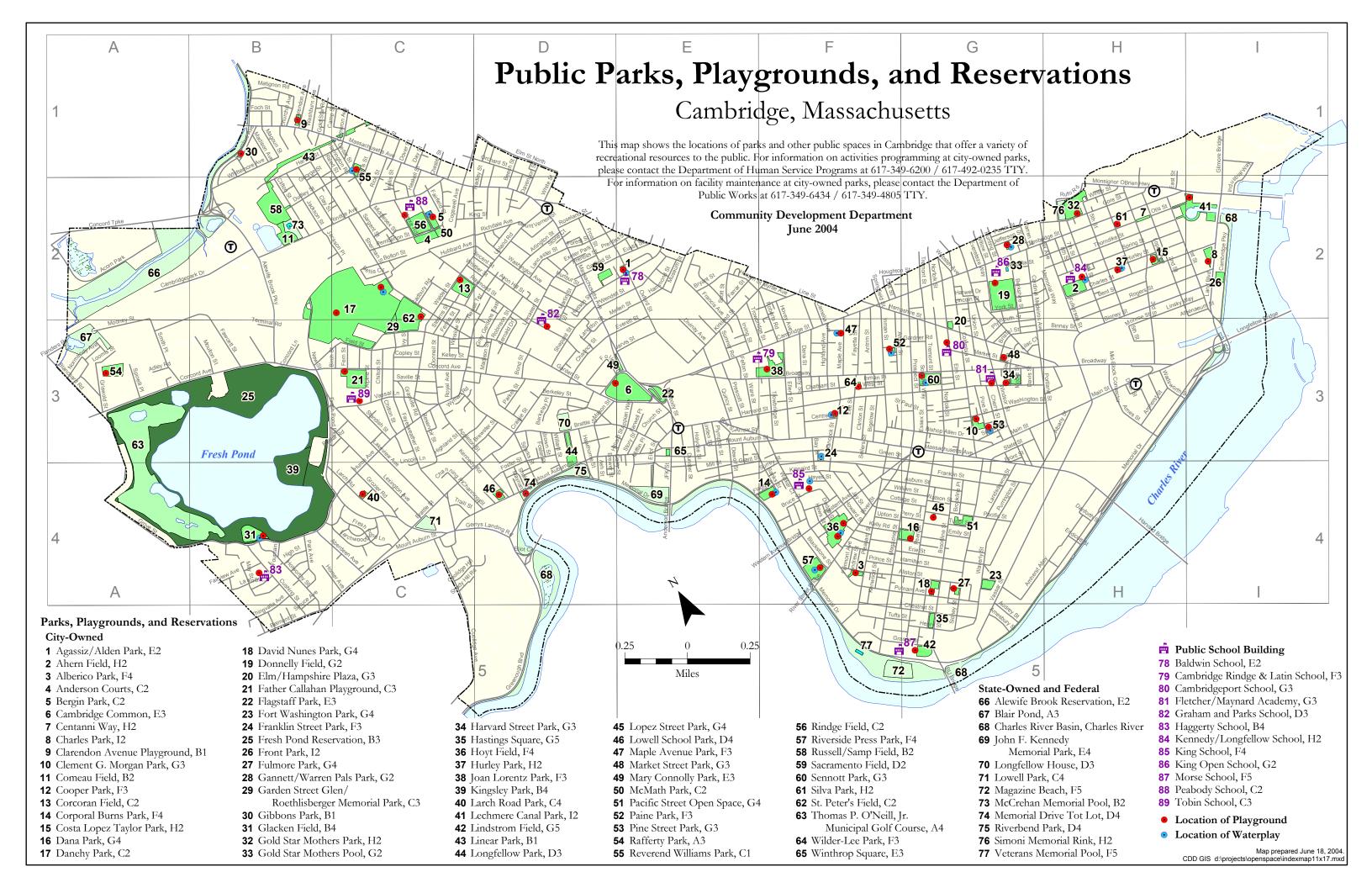
	PARK NAME	LOCATION	USE	SIZE (acres)
5	Bergin Park	Haskell St.	Playground, Passive Use	1.1
6	Cambridge Common	Garden St.	Playground, Soccer, Softball, Passive Use	8.6
7	Centanni Way  added 1989	Otis St.	Passive Use	0.5
8	Charles Park added 1988	Rogers St.	Passive Use	1.0
9	Clarendon Ave. Playground	Clarendon Ave.	Playground, Passive Use	0.4
10	Clement G. Morgan Park	Columbia St.	Basketball, Playground, Passive Use	1.1
11	Comeau Field	Rindge Ave.	Little League Baseball	2.3
12	Cooper Park	Hancock St.	Playground, Water Play	0.2
13	Corcoran Field	Upland Rd.	Basketball, Playground, Softball	2.7
14	Corporal Burns Park	Flagg St.	Basketball, Playground, Street Hockey, Water Play, Passive Use	1.3
15	Costa Lopez Taylor Park	Third St.	Basketball, Playground, Passive Use	0.8
16	Dana Park	Magazine St.	Basketball, Playground, Tot Lot, Passive Use	1.4
17	Danehy Park added 1990	Garden St.	Exercise Circuit, Softball, Soccer, Playground, Passive Use, Water Play	49
18	David Nunes Park	Brookline St.	Basketball, Street Hockey, Playground, Passive Use	0.9
19	Donnelly Field (Frisoli Youth Center)	Cambridge St.	Little League Baseball, Basketball, Indoor Center, Playground, Softball	7.2
20	Elm/Hampshire Plaza	Hampshire St.	Passive Use	0.3
21	Father Callahan Playground (Tobin School)	Concord St.	Little League Baseball, Indoor Center, Baseball, Playground	3.3

	PARK NAME	LOCATION	USE	SIZE (acres)
22	Flagstaff Park	Massachusetts Ave.	Passive Use	1.2
23	Fort Washington Park	Waverly St.	Passive Use	1.0
24	Franklin Street Park	Franklin St.	Passive Use	0.1
25	Fresh Pond Reservation	Fresh Pond Parkway	Biking Paths, Jogging Paths, Passive Use	89
26	Front Park  added 1985	Cambridge Parkway	Passive Use	1.0
27	Fulmore Park	Putnam Ave.	Playground, Passive Use	0.4
28	Gannett/ Warren Pals Park	Marion St.	Playground, Water Play	0.4
29	Garden Street Glen / Roethlisberger Memorial Park added 1990	Hazel St.	Passive Use	1.3
30	Gibbons Park	Seagrave Rd.	Playground, Passive Use	0.1
31	Glacken Field (Fresh Pond Reservation)	Huron Ave.	Basketball, Playground, Soccer, Softball, Tennis, Passive Use	2.1
32	Gold Star Mothers Park	Gore St.	Basketball, Playground, Softball, Water Play	3.6
33	Gold Star Mothers Pool	Berkshire St.	Swimming	0.1
34	Harvard Street Park	Harvard St.	Community Garden, Playground, Tennis, Passive Use	1.0
35	Hastings Square	Brookline St.	Passive Use	0.7
36	Hoyt Field (Moore Youth Center)	Montague St.	Basketball, Playground, Softball, Tennis, Playground, Tot Lot, Water Play	4.5
37	Hurley Park	Hurley St.	Playground, Water Play	0.3
38	Joan Lorenz Park	Broadway	Passive Use	2.9
39	Kingsley Park (Fresh Pond Reservation)	Fresh Pond Parkway	Passive Use	9.8
40	Larch Road Park	Larch Rd.	Basketball, Playground	0.1

	PARK NAME	LOCATION	USE	SIZE (acres)
41	Lechmere Canal Park  added 1987	Otis St.	Playground, Passive Use	7.5
42	Lindstrom Field (Morse School)	Memorial Drive	Little League Baseball, Basketball, Indoor Center, Playground	1.4
43	Linear Park added 1985	Harvey St.	Biking , Jogging, Passive Use	4.0
44	Longfellow Park	Mount Auburn St.	Passive Use	2.2
45	Lopez Street Park	Lopez St.	Playground	0.1
46	Lowell School Park	Mount Auburn St.	Basketball, Playground	0.5
47	Maple Avenue Park	Maple Ave.	Playground	0.1
48	Market Street Park	Market St.	Playground, Passive Use	0.1
49	Mary Conlan Park	Massachusetts Ave.	Passive Use	0.3
50	McMath Park	Pemberton St.	Community Garden, Passive Use	0.5
51	Pacific Street Open Space added 2003	Pacific St.	Soccer, Passive Use	1.4
52	Paine Park	St. Mary Rd.	Basketball, Playground, Passive Use, Water Play	0.4
53	Pine Street Park	Pine Street	Water Play, Tot Lot	0.1
54	Rafferty Park	Griswold St.	Basketball, Playground, Softball, Tennis	2.3
55	Reverend Williams Park	Cedar St.	Basketball, Playground, Passive Use, Water Play	0.6
56	Rindge Field (Gately Youth Center)	Pemberton St.	Baseball, Basketball	3.4
57	Riverside Press Park	River St.	Basketball, Playground, Tennis, Passive Use, Water Play	3.1
58	Russell/Samp Field	Clifton St.	Football, Little League Baseball, Soccer	10
59	Sacramento Field	Sacramento St.	Basketball, Soccer, Softball	1.2

	PARK NAME	LOCATION	USE	SIZE (acres)
60	Sennott Park (Area 4 Youth Center)	Norfolk St.	Indoor Center, Playground, Soccer, Softball, Basketball	2.7
61	Silva Park	Cambridge St.	Playground, Passive Use	0.3
62	St. Peter's Field	Sherman St.	Baseball, Basketball, Playground, Softball	7.0
63	Thomas P. O'Neill, Jr. Municipal Golf Course	Huron Ave.	Golf	50
64	Wilder/Lee Park	Lee St.	Playground, Passive Use	0.2
65	Winthrop Square	Winthrop St.	Passive Use	0.3
66	Alewife Brook Reservation (Mass. DCR)	Acorn Park	Open Space	48
67	Blair Pond (Mass. DCR)	Flanders Rd.	Passive Use	5.7
68	Charles River Basin (Mass. DCR)	Memorial Dr. / Cambridge Pkwy.	Pedestrian/Bike Paths	73
69	John F. Kennedy Memorial Park (Mass. DCR)	Memorial Drive	Passive Use	1
70	Longfellow House (National Parks Service)	Brattle St.	Museum Site	1.9
71	Lowell Park (Mass. DCR)	Brattle St.	Passive Use	3.2
72	Magazine Beach (Mass. DCR)	Memorial Drive	Biking, Canoe Ramp, Jogging, Soccer, Softball, Swimming, Passive Use, Water Play	24 (included in Charles River Basin)
73	McCrehan Memorial Pool (Mass. DCR)	Rindge Ave.	Swimming	1.7
74	Memorial Drive Tot Lot (Mass. DCR)	Memorial Drive	Playground	3.6
75	Riverbend Park (Mass. DCR)	Memorial Dr.	Pedestrian/Bike Paths	15 (included in Charles River Basin)
76	Simoni Memorial Rink (Mass. DCR)	Gore St.	Skating Rink	1.3
77	Veterans Memorial Pool (Mass. DCR)	Memorial Dr.	Swimming	0.2

	SCHOOL NAME	LOCATION	USES (IF APPLICABLE)
78	Baldwin School	Sacramento St.	(see Agassiz/Alden Park)
79	Cambridge Rindge & Latin School / War Memorial	Broadway	Indoor Center, Playground, Swimming, Tennis
80	Cambridgeport School	Elm St.	Basketball, Playground, Tot Lot
81	Fletcher/Maynard Academy	Windsor St.	Playground
82	Graham and Parks School	Linnaean St.	Playground
83	Haggerty School	Cushing St.	School, Playground
84	Kennedy/Longfellow School	Spring St.	Playground, Water Play
85	King School	Putnam Ave.	Basketball, Indoor Center, Playground, Tot Lot, Water Play
86	King Open School	Cambridge St.	(see Donnelly Field)
87	Morse School	Granite St.	(see Lindstrom Field)
88	Peabody School	Walker St.	Basketball, Indoor Center, Playground
89	Tobin School	Vassal Ln.	Tot Lot (also see Father Callahan Playground)



## **Public Parks, Playgrounds, and Reservations**

PARK HOURS OF OPERATION ABBREVIATIONS— Reg: Regular hours- dawn to dusk, year-round

Ext'd: Dawn to dusk, extended to 10:00PM Apr. 1-Oct. 31 Late: Dawn to 11:00PM, year-round

Athletics Uses For permit information, contact DHSP-Recreation at 617-349-6238

Community Garden

Fields: Lighted playing fields op Call: Call managing agency for		Playground	Water Play	t/Bike Pa	ittle League)	ligh School)	Basker	So	Sof	Te		For infor	mation tion C	, contact the ommission a	t
Name	Location	und	Play	aths	gue)	<u>0</u>	sketball	Soccer	Softball	<b>Tennis</b>	Other $(s) = se$	easonal		Agency	 Hour
1 Agassiz/Alden Park	Oxford St at Sacramento St	t 🗸	<b>V</b>											DPW	Reg
2 Ahern Field	Fulkerson St at Charles St		<b>V</b>				<b>V</b>		<b>V</b>		Street F	łockey		DPW	Ext'd
3 Alberico Park	Pleasant St at Allston St						<b>V</b>							DPW	Ext'd
4 Anderson Courts	Pemberton St at Yerxa Rd						<b>V</b>							DPW	Ext'd
5 Bergin Park	Pemberton St at Haskell St		<b>V</b>											DPW	Ext'd
6 Cambridge Common	Garden St at Waterhouse							<b>V</b>	<b>V</b>					DPW	Ext'd
7 Centanni Way	Third St at Otis St	t 🔲												DPW	Ext'd
8 Charles Park	Land Blvd at Rogers St													DPW	Ext'd
9 Clarendon Avenue Playground	Mass Ave at Clarendon Ave													DPW	Ext'd
10 Clement G Morgan Park	Columbia St at Washington St						<b>V</b>							DPW	Ext'd
11 Comeau Field	Rindge Ave	;			~	<u>'</u>								DPW	Ext'd
12 Cooper Park	Hancock St at Centre St		<b>V</b>											DPW	Reg
13 Corcoran Field	Upland Rd at Raymond St						<b>V</b>		<b>V</b>				<b>✓</b>	DPW	Ext'd
14 Corporal Burns Park	Memorial Dr at Flagg St	_	<b>V</b>				<b>V</b>	_			Street F	łockey		DPW	Ext'd
15 Costa Lopez Taylor Park	Charles St at Lopez Ave	_					<b>V</b>							DPW	Ext'd
16 Dana Park	Magazine St at McTernan St	_					<b>V</b>							DPW	Late
17 Danehy Park	Garden St	_	<b>V</b>	<b>V</b>	Ī	Ī			✓	Ī	Track			DHSP	Ext'd
18 David Nunes Park	Brookline St at Allston St	_		$\bar{\Box}$	Ī	Ī	<b>V</b>		$\overline{\Box}$	Ī	Street F	łockey		DPW	Ext'd
19 Donnelly Field	Berkshire St at York St			$\bar{\Box}$	_	7	<b>V</b>		<u></u>	Ī				DPW	Fields
20 Elm/Hampshire Plaza	Hampshire St at Elm St	_		Ī	Ī	1			$\overline{\Box}$	Ī	]			DPW	Reg
21 Father Callahan Playground	Concord Ave at Alpine St			$\bar{\Box}$	V	7	<b>V</b>		$\overline{\Box}$	Ī				DPW	Ext'd
22 Flagstaff Park	Mass Ave at Garden St		<u> </u>	Ī	Ī	1 🗆		<u> </u>	$\overline{\Box}$	Ī	]		一	DPW	Ext'd
23 Fort Washington Park	Waverly St		<u> </u>	Ī	Ī	1 🗆		<u> </u>	$\overline{\Box}$	Ī	]		一	DPW	Ext'd
24 Franklin Street Park	Franklin St at Bay St	_	<b>V</b>	Ī	Ī	1 🗆		<u> </u>	$\overline{\Box}$	Ī	]		一	DPW	Reg
25 Fresh Pond Reservation	Concord Ave		<u> </u>	<u></u>	Ī	1 🗆		<u> </u>	$\overline{\Box}$	Ī	]		<u></u>	CWD	Reg
26 Front Park	Cambridge Parkway		<u> </u>	Ī	Ī	1 🗆		<u> </u>	$\overline{\Box}$	Ī	]		一	DPW	Ext'd
27 Fulmore Park	Sidney St at Putnam Ave	_	<u> </u>	Ī	Ī	1 🗆		<u> </u>	$\overline{\Box}$	Ī	]		一	DPW	Ext'd
28 Gannett/Warren Pals Park	Jefferson St	_		ī	Ħ			<u>1                                    </u>	$\overline{\Box}$	Ī			一百	DPW	Reg
29 Garden Street Glen/Roethlisberger M			Ī	Ħ	Ħ	1			$\overline{\sqcap}$	Ī			盲	DHSP	Ext'd
30 Gibbons Park	Columbus Ave at Kimball St		Ī	Ħ	Ħ	1			$\overline{\sqcap}$	Ī			盲	DPW	Reg
31 Glacken Field	Huron Ave at Holworthy St			Ħ	Ħ	1			<u></u>	<b>V</b>			盲	DPW	Ext'd
32 Gold Star Mothers Park	Gore St at Sixth St	_	<b>V</b>	Ħ	Ħ	1							盲	DPW	Ext'd
33 Gold Star Mothers Pool	Cambridge St at Berkshire St	_	Ī	Ħ	Ħ	1			П	Ī	Swimm	ing (s)	盲	DHSP	Call
34 Harvard Street Park	Harvard St at Clark St		Ī	Ħ	Ħ	1			$\overline{\sqcap}$	<b>✓</b>		8 (*)	<u></u>	DPW	Ext'd
35 Hastings Square	Brookline St at Henry St		Ī	Ħ	Ħ	1			$\overline{\sqcap}$	Ī			Ī	DPW	Ext'd
36 Hoyt Field	Western Ave at Howard St		<b>V</b>	Ħ	Ħ	ī	<b>V</b>			<b>✓</b>			盲	DPW	Fields
37 Hurley Park	Hurley St at Fourth St		<b>V</b>	Ħ	Ħ	ī	<b>V</b>	_	$\overline{\Box}$	Ë			盲	DPW	Reg
38 Joan Lorentz Park	Broadway at Ellery St			Ħ	Ħ	1 🗆		<u>                                     </u>	$\frac{\Box}{\Box}$		<u>,                                     </u>			DPW	Ext'd
39 Kingsley Park	Fresh Pond Parkway			<u></u>	Ħ	1 🗆		<u>                                     </u>	$\frac{\Box}{\Box}$		<u>,                                     </u>			DPW	Ext'd
40 Larch Road Park	Larch Rd			Ħ	Ħ	1 🗆		<u>                                     </u>	$\frac{\Box}{\Box}$		<u>,                                     </u>			DPW	Reg
41 Lechmere Canal Park	First St at Otis St			Ħ	Ħ	1			$\overline{\sqcap}$	Ī			盲	DPW	Ext'd
42 Lindstrom Field	Brookline St at Granite St			Ħ		1			$\overline{\sqcap}$	Ī			盲	DPW	Ext'd
43 Linear Park	Davis Sq to Russell Field		ī	<b>V</b>	tř	ī			$\overline{\sqcap}$		]		一一	DPW	Ext'd
44 Longfellow Park	Mount Auburn St at Willard St		ī	Ħ	Ħ	ī		<u>i                                    </u>	$\overline{\sqcap}$	$\overline{\Box}$	]		一一	DPW	Ext'd
45 Lopez Street Park	Lopez St		ī	Ħ	Ħ	ī			$\overline{\sqcap}$		]		一一	DPW	Reg
46 Lowell School Park	Mount Auburn St at Lowell St			Ħ	Ħ	ī		<u>i                                    </u>	$\overline{\sqcap}$	$\overline{\Box}$	]		一一	DPW	Ext'd
47 Maple Avenue Park	Maple Ave at Marie Ave			Ħ	Ħ	1 🗆			$\overline{\sqcap}$	Ī			一一	DPW	Reg
		ت ا	ر کی ر		-			. Ш	<u> </u>	_					8

## **City of Cambridge, Massachusetts**

- ACCESSIBILITY NOTICE -The City of Cambridge does not discriminate on the basis of disability, and has strived to ensure that its recreational programs and facilities are accessible to all. For more information, contact the Cambridge Commission for Persons with Disabilities at 617-349-6297 voice / 617-492-0235 TTY. http://www.cambridgema.gov/DHSP2/disabilities.cfm

Athletics Uses-For permit information, contact DHSP-Recreation at 617-349-6238

Community Garden -For information, contact the Conservation Commission at 617-349-4680.

		Play ound	at	ıgue)	hool)	₽	Š	₽	Other $\frac{617-349}{}$	<del>-1</del> 000.		
Name	Location	Play ound	aths	le)	<u> </u>	tball	ccer	ftball	Other $[617-349]$ $(s) = seasonal$		Agency	Hours
48 Market Street Park	Market St at Bristol St	<b>&gt;</b>									DPW	Reg
49 Mary Connolly Park	Mass Ave at Waterhouse										DPW	Reg
50 McMath Park	Pemberton St at Haskell St									<b>✓</b>	DPW	Ext'd
51 Pacific Street Open Space	Pacific St at Sidney St						<b>~</b>				DPW	Ext'd
52 Paine Park	Amory St at St Mary Rd	<b>V V</b>				<b>V</b>					DPW	Reg
53 Pine Street Park	School St at Pine St	<b>V V</b>									DPW	Reg
<b>54</b> Rafferty Park	Griswold St	<b>V</b>		<b>V</b>		<b>V</b>					DPW	Ext'd
55 Reverend Williams Park	Dudley St at Cedar St	<b>V V</b>				<b>~</b>					DPW	Ext'd
<b>56</b> Rindge Field	Pemberton St at Yerxa Rd	<b>V</b>			<b>V</b>				✓		DPW	Ext'd
57 Riverside Press Park	Memorial Dr at River St	<b>V V</b>				<b>V</b>			✓		DPW	Ext'd
58 Russell/Samp Field	Clifton St at Dudley St			<b>V</b>			<b>V</b>		Football		DPW	Ext'd
59 Sacramento Field	Sacramento St					<b>V</b>	<b>V</b>	<b>V</b>		<b>V</b>	DPW	Ext'd
60 Sennott Park	Broadway at Norfolk St	<b>V V</b>				<b>V</b>	<b>V</b>	<b>V</b>			DPW	Ext'd
61 Silva Park	Otis St at Fourth St	<b>V</b>									DPW	Reg
62 St Peter's Field	Sherman St	<b>V</b>			<b>V</b>	<b>V</b>		<b>V</b>			DHSP	Fields
63 Thomas P. O'Neill, Jr. Municipal Golf Cou	irse Huron Ave								Golf		DHSP	Call
64 Wilder-Lee Park	Lee St at West St	<b>V</b>									DPW	Reg
65 Winthrop Square	JFK St at Winthrop St										DPW	Reg
<b>66</b> Alewife Brook Reservation	Cambridgepark Dr		<b>~</b>								DCR	Call
67 Blair Pond	Flanders Rd										DCR	Call
68 Charles River Basin	Memorial Dr/Cambridge Pkwy		<b>V</b>								DCR	Call
69 John F Kennedy Memorial Park	Memorial Dr at JFK St										DCR	Call
70 Longfellow House	Brattle St near Longfellow Park										NPS	Call
71 Lowell Park	Brattle St at Fresh Pond Pkwy					<b>~</b>					DCR	Call
72 Magazine Beach	Memorial Dr at Magazine St			<b>~</b>			<b>✓</b>	<b>✓</b>			DCR	Call
73 McCrehan Memorial Pool	Rindge Ave at Clifton St								Swimming (s)		DCR	Call
74 Memorial Drive Tot Lot	Mt Auburn St near Memorial Dr	<b>✓</b> □									DCR	Call
75 Riverbend Park Memorial Dr fr	om Eliot Bridge to Western Ave		<b>~</b>								DCR	Call
76 Simoni Memorial Rink	Gore St at Sixth St								☐ Ice Skating (s)		DCR	Call
77 Veterans Memorial Pool	Memorial Dr at Magazine St								Swimming (s)		DCR	Call
78 Baldwin School (see Agassiz/Alden Park)	28 Sacramento St										DPW	Reg
79 Cambridge Rindge & Latin School (see Jo	an Lorentz Park) 459 Broadway								✓		DPW	Reg
80 Cambridgeport School	89 Elm St	<b>✓</b> □									DPW	Reg
81 Fletcher/Maynard Academy	225 Windsor St	<b>✓</b> □									DPW	Reg
82 Graham and Parks School	44 Linnaean St	$\checkmark$									DPW	Reg
83 Haggerty School	110 Cushing St	$\checkmark$									DPW	Reg
84 Kennedy/Longfellow School (see Ahern F	ield) 158 Spring St										DPW	Reg
85 King School	100 Putnam Ave	<b>V V</b>									DPW	Reg
<b>86</b> King Open School (see Donnelly Field)	850 Cambridge St										DPW	Reg
87 Morse School (see Lindstrom Field)	40 Granite St										DPW	Reg
88 Peabody School (see Rindge Field)	70 Rindge Ave										DPW	Reg
89 Tobin School	197 Vassal Ln										DPW	Reg

AGENCIES AND CONTACT INFORMATION

**DPW: Cambridge Department of Public Works** 

24-Hour Operations Center: 617-349-4800 / 617-349-4805 TTY http://www.cambridgema.gov/theworks

**DHSP:** Cambridge Department of Human Service Programs

Athletic Field Permits: 617-349-6238 Danehy Park: 617-349-4895 Gold Star Mothers Pool: 617-349-6310 Thomas P. O'Neill, Jr. Municipal Golf Course: 617-349-6282 http://www.cambridgema.gov/DHSP2

**CWD:** Cambridge Water Department Fresh Pond Reservation: 617-349-4793

http://www.cambridgema.gov/CWD

DCR: Massachusetts Department of Conservation and Recreation

Charles River and Alewife Brook Reservation Areas: 617-626-1413 Athletic Fields, Skating Rinks, Pools: 617-727-4708 Lowell Park: 617-626-1413 http://www.mass.gov/dcr

**NPS: US National Park Service** 

Longfellow House: 617-876-4491 http://www.nps.gov

#### SECTION 6 COMMUNITY GOALS

#### A. Description of Process: Open Space Planning in Cambridge

#### **PLANNING PROCESSES**

The City of Cambridge has a tradition of active citizenry who express their opinions through a variety of public fora, including meetings and committees related to open space issues. The City encourages residents to engage in discourse with elected officials, staff, and each other in order to come as close as possible to consensus about important issues. Indeed, these types of processes have strongly informed this open space plan.

Described below are the most significant open space and recreation planning processes that have taken place in the city since the 1994 Open Space and Recreation Plan was approved. These are listed in chronological order, starting with the most recent.

2002 Open Space and Recreation Telephone Survey

The City recognizes that many residents choose not to attend public meetings. Whether it is because of work or family commitment, lack of interest or comfort, or just a feeling that their opinion does not matter, some residents do not often directly express their opinion on civic issues. Because the opinions of all residents are important when making open space and recreation public policy, the City has endeavored to reach a representative group of residents through the use of a telephone survey.

In Spring 2002, the City of Cambridge hired Atlantic Research and Consulting to conduct a survey of Cambridge residents regarding their opinions on issues related to open space and recreation. The goal of this research was to produce a statistically reliable survey that would:

- Identify key issues facing the city;
- Understand park use and satisfaction among residents of various age groups;
- Analyze the gap between the importance of park resources versus how well the City of Cambridge provides these resources; and,
- Learn how residents would like to see funding for open space and recreation distributed.

All surveys were conducted by telephone between June 18 and June 28, 2002. In all, 381 interviews were completed with Cambridge residents aged 18 or over. The sample for the survey was generated using a random digit dial program. The overall results of the survey can be interpreted at a 95% confidence level with a + or - 5% margin of error. Data was slightly weighted to accurately represent the income distributions found in the latest Census data. The results of this survey were important in establishing Section 7B Community Needs.

#### 2004 Citizens Opinion Survey

The city conducted a telephone survey in which residents were asked to rate their satisfaction on a wide range of city services and general quality of life issues. The results of this survey provide some basic information on residents' satisfaction with the open space system. About 89% of respondents said that they have visited a park at least once over the course of the year, with about 54% having made at least 13 visits. About 60% of respondents rated the open space and recreation opportunities in Cambridge as "excellent" or "good," and 82% rated Cambridge's parks and park maintenance as "excellent" or "good."

#### Community Preservation Act

While not as critical in formulating this plan, the Community Preservation Act (CPA) will be a very significant factor in open space planning in upcoming years. The voters of Cambridge approved the CPA in November of 2001. In so doing, the City will raise an anticipated \$4.5 million in both FY2002 and FY2003, as well as leverage an estimated \$4.5 million in matching state funds in FY2003, for a total of \$13.5 million during the next couple years.

In March of 2002, the City Manager appointed a committee to determine the allocation of this money. The Committee held a public hearing on April 22, 2002. The most pressing need identified by the committee, by those in attendance at the public hearing, and reflected in the telephone survey, is that of more affordable housing. For this reason, and because of the high land acquisition and development costs faced by affordable housing developers, 80% of the CPA funding was allocated toward affordable housing, with 10% allocated to historic preservation and open space respectively.

#### Report of the Green Ribbon Open Space Committee

Seeking a systematic approach to open space acquisition decisions, the City-Manager appointed a 17-member Green Ribbon Open Space Committee in February, 1999 to develop criteria for expanding and improving the city's open space system. They began work with detailed discussions of the existing use and distribution of parks and of their visions for the future of the Cambridge open space system. Various experts presented information on the following pertinent topics:

- Demographic information, including maps showing the city's population density, income distribution, age structure, and distribution of children from elementary through high-school age;
- Current open space and park use according to park and school programs; and
- Recreation needs, adequacy of available fields for programmed uses and league sports, and projected recreation activities that would continue to increase in popularity.

They inventoried different park types and identified areas that do not have access to each park type. They also conducted a mapping analysis of the amount of public open space within 1/4 mile of every 1,000 people. This map (attached) led to three key observations:

- The larger Central Square neighborhood, including upper Cambridgeport, Area Four, Mid-Cambridge, and eastern Riverside, is one of the areas with the least public open space within ¼ mile per 1,000 residents.
- Much of the Porter Square area has no public open space within a 1/4 mile.
- Areas with a more generous four or more acres of public open space within ¼ mile per 1,000 population exist near Danehy Park, Fresh Pond Reservation, and along the Charles River.

Using all of this information, the committee determined areas of need for each park type and then determined top priorities among those areas [note: park types are defined using National Recreation and Parks Association Guidelines]. When determining priorities the committee gave preference to areas with:

Low and moderate-income households;

- Relatively fewer acres of open space within \(^{1}\)4 mile per 1,000 residents;
- Smaller than average residential lot sizes; and
- A higher density of children.

The committee also inventoried park uses and identified uses that are or are expected to be underserved based on planned programming. Using information about current and future recreation programming, committee resources, and maps to locate where recreational activities occur in Cambridge, the committee also recommended priorities with respect to park use.

The committee recommendations form one component of the Community Needs section of this report, Section 7B. It is worth noting here that the recommendation of the Green Ribbon Open Space Committee have already begun to be implemented, with the acquisition of a parcel at 238 Broadway which will serve to expand an existing tot lot and green area into a neighborhood park and to create a play yard for students at the Cambridge Elementary Schools' Fletcher-Maynard Academy.

#### Neighborhood Studies

During the 1980s, the City of Cambridge (along with the surrounding region), witnessed a wave of commercial growth and economic development. This growth expanded the City's tax base and created new jobs and opportunities for residents. While many residents welcomed this prosperity, it also brought about an increasing awareness of issues that are of concern to neighborhood residents: increased building density, traffic congestion and parking problems, the rising cost of housing, inadequate open space, and the threat to neighborhood character and quality of life.

Since 1988, the Community Development Department (CDD), through its neighborhood planning program, has conducted comprehensive studies in ten of the city's neighborhoods. The object of the neighborhood studies is to identify major planning opportunities through a joint effort between CDD and a citizen committee appointed by the City Manager. Through this collaborative effort, the goal is to analyze the present situation in the neighborhood and make recommendation for a course of action. Recommendations address such issues as traffic and parking, housing affordability and homeownership, neighborhood commercial areas and employment, open space and parks, and rezoning for areas that are inappropriately zoned. As part of each neighborhood study, CDD collects data on demographic changes since 1980, as well as changes in housing markets, land use, and development potential in each neighborhood.

For each study, the City Manager appoints a committee of neighborhood residents, small business owners, and civic leaders, as well as staff from CDD, to review the data, identify problems that exist in the neighborhood, and make recommendations as to how to resolve these problems. Where appropriate, the recommendations are incorporated into the work programs of City departments for implementation; in some cases, this implementation takes place over a short period of time, in others it is part of long-term strategic planning. The City has also begun a policy of updating neighborhood studies, with the goal of each neighborhood being evaluated every three years to keep recommendations current.

Because these detailed, neighborhood-specific recommendations serve as the backbone of the City's planning program, they were given special weight in formulating this open space plan. A portion of Section 7B, Community Needs, and Section 8, Goals and Objectives, is from the neighborhood studies and their ongoing updates.

#### The Cambridge Zoning Ordinance

The Cambridge Zoning Ordinance contains a variety of mechanisms to encourage of require the development of open space. All residential districts have minimum requirements for permeable open space. While these requirements do not create public open space, they enhance the appearance and environmental quality of neighborhoods, while helping to alleviate some of the problems associated with stormwater runoff on impervious surface. Open space is required for commercial developments within the high-density C-2 and C-3 for any project over 20,000 feet (even those development that are as-of-right).

Commercial districts do not have any universal open space requirements, but any project that goes through the PUD process is likely to have some component of open space required, often public, as part of stormwater management requirements. In addition, through project review, project between 25,000 and 50,000 square feet there are standards for open space. Projects above 50,000 square feet require a special permit. This special permit process requires developers to meet a series of urban design guideline, which often include creating open space.

Throughout the years, the Cambridge Zoning Ordinance has resulted in a great deal of open space, especially in East Cambridge, Lechmere Canal, and soon in North Point.

#### Park Renovations

Beyond routine maintenance, the City conducts several total park renovation projects each year. These renovations, planned by the professional landscape architect on the CDD staff, involve collaboration between neighborhood residents and numerous city departments (DPW, Recreation, Police, Electrical, and others) to ensure the best product possible. In addition, the Cambridge One-Percent for Arts program requires that one percent of the budget in any capital improvement project is set aside for public art. This program, administered by the Cambridge Arts Council, adds a unique element to park improvement projects.

All park renovations have a public participation component. An average renovation might have two or three public meetings, while a larger project might have a dozen meetings with various interested parties. The role of the public in these processes is to provide staff with local knowledge about how the park is used, what has been successful and unsuccessful, and what potential future uses are desired. These meetings not only provide information for specific renovations, but they also keep staff informed of issues affecting the city's many neighborhoods.

The City has worked to create unique parks that serve a variety of purposes. These have included the incorporation of new type of play structures, water play features, community gardens, and public art work. All of these features serve to make the park system something residents of Cambridge can be proud of.

#### B. Statement of Open Space and Recreation Goals

The Cambridge City Council, the policy-setting and legislative branch of the city, authorizes public improvements and expenditures, adopts regulations and ordinances, levies taxes, and adopts the annual budget. As one of their guiding goals for FY2002 they established that "a healthy environment" is an important community value, and pledged to:

 Support responsible preservation and maintenance of our existing open space while striving to expand our inventory, particularly in areas of the community where it is needed most. This overarching theme extends to the specific actions of the Executive Departments. As the City's Chief Executive Officer, the City Manager provides leadership to and administration of all departments and services. The City Manager's FY2002 Key Implementation Goals include:

- Continue open space improvements in Cambridge neighborhoods;
- Effectively maintain parks, playground, squares and plazas, and fully implement a program of arbor culture;
- Work to acquire additional open space in the eastern part of the City;
- Continue to work to protect natural resources.

#### SECTION 7 ANALYSIS OF NEEDS

#### A. Summary of Resource Protection Needs

As indicated in Section 4, Environmental Inventory, the major environmental resources in Cambridge include the Alewife Reservation, the Charles River Reservation, and the Fresh Pond Reservation. All of these are permanently protected as open space, but each has aspects that could stand to be improved.

Both Alewife and the Charles River are held by the Massachusetts Department of Conservation and Recreation (DCR). The former is going through the initial stages of a planning process, while the latter has a recently completed master plan. Both of these processes contain a public participation component. It is important that Cambridge be supportive of the identified goals of the community and the DCR as it works to implement these plans. At times there will be opportunities for the City to play a more active role in enhancing a DCR property, such as the Magazine Beach joint management agreement. Through this agreement, the City is funding certain improvements to Magazine Beach in exchange for priority scheduling.

While not the key decision-maker in Alewife or on the Charles, the City holds primary responsibility for the upkeep of the Fresh Pond Reservation, for which a detailed Master Plan was completed in 2000. This 18-member committee adopted the following their guiding vision statement for Fresh Pond [excerpted]:

The Fresh Pond Master Plan expresses the vital importance of protecting and enhancing both the water quality of Fresh Pond and its open space and naturalistic character. The Plan embodies a vision and sets framework for the preservation of water quality, recreational open space, natural green spaces, wildlife habitat, and a refuge from urban life.

The resulting plan set policies for Land-Use, Access, Recreation, Public Facilities and Services, and Education, as well as recommendations for implementation. Major recommendations are listed in Section 8, Goals and Objectives, of this report.

#### B. Summary of Community's Needs

These community needs were identified through the recent Cambridge Open Space and Recreation Telephone Survey, the recent City Manager Survey of City Services, and the Report of the Green Ribbon Open Space Committee. Each of these processes is described in detail in Section 6A of this report, Description of the Process.

#### GENERAL COMMUNITY NEEDS

(From the 2002 Open Space and Recreation Survey and the 2003 City Manager Survey of City Services)

When asked to rate the importance of specific park functions, four out of five respondents reported that it is very or somewhat important to have a park to beautify their neighborhoods and for environmental benefits. In addition, when asked what aspects of the Cambridge park system they value most, one-third mention the greenery, nature, or open space.

Respondents were asked to rate both the importance of and their satisfaction with a variety of park functions. Cambridge residents rated such benefits as 'beautifying the neighborhood' and 'environmental benefits' were rated as the most important park functions. When asked to rate what park functions they are most satisfied with, residents give the highest ratings to being able to pass or walk through the parks, the ability to engage in individual exercise, and that the parks beautify their neighborhood. Residents report moderate levels of satisfaction with park maintenance. When asked how Cambridge could best improve the park system, better maintenance was mentioned most frequently.

Despite these concerns about maintenance issues, when asked about the allocation of additional resources, Cambridge residents clearly identify the two key areas where they feel additional park resources should be directed as the acquisition of new land for parks and improving existing park resources. Only 8% feel additional resources should be used to improve facility maintenance.

Although the strong majority of Cambridge residents report they feel safe walking in Cambridge parks during the day, only one-quarter feel safe in the evening. Men are significantly more likely than women to report they feel safe walking alone both during the day and at night.

In general, residents are satisfied that Cambridge parks meet the needs of individuals of all age groups. The highest reported levels of satisfaction are with how well Cambridge Parks meet the needs of toddlers.

The majority Cambridge residents report the most effective means of communication with them regarding recreation issues are traditional paper methods, such as mailing, flyers or posters and email.

#### (Incorporate info from City Manager Survey)

These Community Needs determined through this telephone were used to help formulate some of the Goals and Objectives cited in Section 8.

#### ACOUISITION NEEDS/ FIVE-YEAR ACTION PLAN

The following priorities for acquisition were identified in the Report of the Green Ribbon Open Space Committee. Wherever feasible, the City's open space acquisitions should help address the need for the following actions.

#	Acquisition Priority	Timeframe	Progress to Date
1	Tot lots in the North Prospect Street and Porter Square Areas.	Long-term	Trogress to bute
2	Neighborhood parks in Area 4/ Sennott Park area. Central	Area 4/ Sennott Park:	Area 4/ Sennott Park: The City has acquired the 238 Broadway parcel in

	Square, Porter Square, Prospect Street.	Short-term	order to create a neighborhood park.
		Others:	
		Long-term	
3	School parks at Fletcher-Maynard Academy, Graham and Parks Elementary, and Longfellow Elementary.	Completed	- Fletcher-Maynard has a newly renovated school yard, and is within one-block of the soon-to-be completed 238 Broadway park expansion.
			- Graham and Parks Elementary School will be closed as part of the school contraction process.
			- Longfellow School has a recently renovated tot lot, and is one block away from Wilder Playground.
4	Community parks in Area 4/ Sennott Park area, Mid- Cambridge, Porter Square/ Northern Agassiz, and Upper Cambridgeport.		
5	The conversion of the Grand Junction Railway Pathway into a bike path, a direct connection between Fresh Pond Reservation and Linear Park, and advocacy for a rail and trail conversion of an older railroad line through Somerville that connects North Point and Linear Park at Cedar Street.		
6	Three to four multipurpose fields that would accommodate soccer, field hockey, and lacrosse equally. If possible, these fields should be located in the eastern half of Cambridge.		
7	The creation of on additional full-sized high school baseball field.		
8	More emphasis on passive uses throughout the city. If well-designed, such uses can be accommodated in small spaces.		

### C. Summary of Management Needs

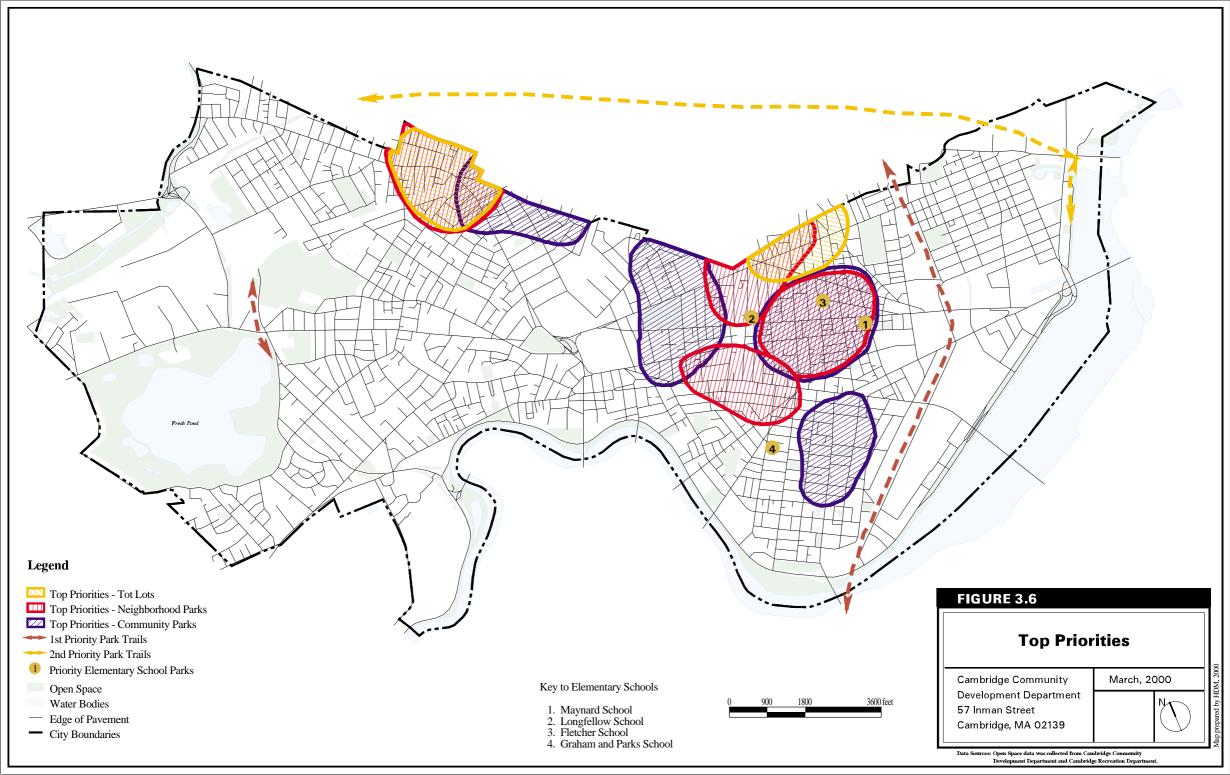
The City and the DCR control the largest portions of open space within the Cambridge. Some private open space also serves a semi-public benefit (whether through just beautifying an area

or being accessible for public use. The City's management strategy varies depending on its relationship to the space.

For City-controlled open spaces, it is important that the many agencies involved in the procurement, design, development, maintenance, and programming of these spaces communicate well. The City has a staff Open Space Committee that discusses open space policy issues and specific projects. This committee includes representatives from the City Manager's Office, CDD, DPW, Recreation, Water Department, and Conservation Commission.

As described under Resource Protection needs, the City should support the efforts of the MDC (now DCR) as it begins master planning for Alewife Reservation and works to implement the Master Plan for the Charles River Basin. The City will also continue its work with the DCR on the renovation of Magazine Beach per their joint management agreement.

Finally, the City works with developers to encourage the creation of open space in private development. This occurs through the requirements described in Section 6A, Planning Process. The City should continue to encourage private development that serves a public benefit wherever possible.



#### SECTION 8 GOALS & OBJECTIVES

The 2004 open space goals and objectives for the City of Cambridge are based on recommendations and discussions from several sources, including the 2002 Open Space and Recreation Telephone Survey, the Open Space Committee, the Green Ribbon Open Space Committee, the Fresh Pond Advisory Committee, and the open space recommendations of neighborhood studies and neighborhood study updates throughout Cambridge.

#### A. General Goals and Objectives

The following goals and objectives are derived from the 2002 Open Space and Recreation Telephone Survey (described under Section 6A, Planning Process). More detailed results are shown in Appendix A.

- 1. The most important park functions cited by Cambridge residents were environmental benefits and neighborhood beautification. The City should work to ensure that parks meet resident expectations for these functions.
- 2. Residents' open space and recreation needs vary based on their gender, age, household composition, and place of residence. The City should seek to meet a wide variety of needs in its open space planning
- 3. While residents are satisfied with park maintenance overall, it was cited as an area that could stand improvement. Therefore, the City should investigate how to improve park maintenance. In order to effectively do this, more information must be gathered about the standard by which parks are judged, and whether the City will have a direct role in improving maintenance, or an indirect role (as is the case with DCR property). The City should support the DCR as it tries to improve maintenance of its properties.
- 4. The most important area for resource allocation for residents is for the acquisition of new parks. The City should seek opportunities to acquire new open space wherever possible.
- 5. The City should explore ways to make its parks feel safer, especially in the evening and especially for women.
- 6. The City should pursue the most effective means of communication possible with residents, which include mailings, e-mail, posting on the website, and newspapers.

#### B. Management Goals and Objectives

The Staff Open Space Committee consists of representatives from the City departments most directly involved in creating and maintaining public open space and established the following goals and objectives. The Committee felt it was important to develop a long-term vision as well as specific action items to help achieve this vision.

#### **Overall Vision**

#### Develop the most innovative parks and recreation system anywhere in the country.

The City should develop more creative active and passive parks, creating more innovative opportunities for children, youth, and adults. These innovative opportunities could include skate parks, adventure playgrounds, recreation facilities that are inclusive of people with disabilities (e.g. bank shot facilities), climbing walls, and children's gardens, among other things.

#### **Specific Objectives**

- 1. Develop an Adopt a Park Program.

  Investigate the potential to bring neighborhood volunteers, City departments, and private sources of funding together to improve existing open spaces.
- 2. Identify and maximize small, under-utilized open spaces.

  The City should develop "mini-parks" or gardens throughout the City by using left over parcels of city property, traffic islands, and extra wide sidewalk spaces. Identify sites throughout the city and prioritize based on previous planning studies, estimated renovation cost, and geographic distribution.
- Ensure that all open space projects conducted by outside contractors meet City departments' standards.
   These projects include: streetscapes, traffic islands, mini parks, as well as traditional park projects. Determine the best method for meeting these standards.
- 4. Establish systems for tracking City open space goals and objectives.

  Incorporate reasonable and specific items into work plans. Update and if necessary assemble relevant studies. Investigate methods of sharing information. Develop system for implementation into work plans.
- 5. *Urban Forestry {TO BE COMPLETED}*
- 6. Recreation {TO BE COMPLETED}
- 7. Promote Universal design and access for persons with disabilities
  Prioritize outstanding open space locations and issues from the 1995 ADA Self-Evaluation
  and Transition Plan
- 8. Continue to evaluate and improve the structure of the staff Open Space Committee. Explore the creation a working committee of staff that meets regularly, and is accountable for progress updates on specific and reasonable goals and objectives to the larger committee.

- 9. Develop online and print resources to inform residents about the Cambridge Parks system. This could include interactive maps, easily searchable databases, relevant contact information, user permits, sign up sheets, and photographs.
- 10. Explore the creation and implementation of a comprehensive City Beautification Plan.

#### C. Acquisition Goals and Objectives

The Green Ribbon Committee developed the following recommendations:

#	Recommendation Summary
1	Establish a permanent committee dedicated to providing advice on open space acquisition and enhancement.
2	Form or closely affiliate with an open space non-profit to facilitate open space acquisition.
3	Expand resources for open space enhancement, maintenance, and design, with a focus on facilities in priority areas and for priority uses (listed under "Acquisition Needs" on page 39 of this document).
4	Continue the city's effort to improve access to open space.
5	Incorporate review of open space into the permitting process for large development projects.

#### D. Natural Resources Goals and Objectives

The Fresh Pond Advisory Committee developed the following recommendations:

#	Recommendation Summary	
1	Adoption, implementation, and sufficient funding of integrated, ecological resource management and maintenance policies and practices throughout the Reservation to repair and protect its natural resources.	
2	Implementation of resource usage policies— consistent with protection of the City's water supply— that offer broad and wide enjoyment by the public.	
3	Adoption of the Master Plan Land Use Policy.	
4	Creation of a Fresh Pond Master Plan Advisory Board of residents and City officials to assist City agencies, boards, commissions, and committees in administering the Master Plan.	
5	Addition of Water Department positions under the supervision of the Watershed Manager to implement the Master Plan; these include a reservation site supervisor, an assistant site supervisor, a watershed protection technician, and an additional ranger.	
6	An education effort that engages and precisely informs user of conditions and opportunities at the Reservation in a timely fashion that solicits user involvement.	

# E. Neighborhood Goals and Objectives/ Five-Year Action Plan {In Progress}

The following open space recommendations are summarized from individual neighborhood studies, and any update processes. Please note that the "Study Committee" mentioned in the following recommendations refers to the neighborhood study committee for each neighborhood.

AGASSIZ NEIGHBORHOOD STUDY OPEN SPACE RECOMMENDATIONS (Original study completed in 2003)

#	Recommendation Summary	Progress to Date	Status
1	The City of Cambridge should work with the Massachusetts Bay Transit Authority to explore the feasibility of constructing a park over the commuter rail line adjacent to the Porter Square T stop.	AAVG. OO IV MILL	Sweet
2	The City of Cambridge should pursue the open space preservation funds available through the Community Preservation Act.	During FY02, \$450,000 of CPA revenues was earmarked for open space. In addition, in FY03 \$900,000 in CPA revenues are earmarked for open space. The Community Preservation Fund Committee will be making their recommendations on the use of the FY04 CPA revenues of approximately \$4.8 million during the upcoming months. In addition to the CPA funds raised locally, the City projects approximately \$5 million in state matching funds to be made available in October 2003. Appropriation of these funds, as well additional funds received in FY02 and FY03, will be recommended by that Committee, whose recommendation will then be forwarded to the City Council for appropriation in the coming months.	
3	The Committee recommends an enhanced passive recreational use of Sacramento Field.		
4	The Committee recommends the City of Cambridge consider renaming Sacramento Field to Sacramento Park.	No progress to date	
5	The Committee recommends new signage be placed at the main entrance to Sacramento Field on Sacramento Street.	To be completed in Spring 2003	
6	The recently re-opened second public access route to Sacramento Field/Park should be maintained.	No progress to date.	
7	The City of Cambridge should		

#	Recommendation Summary	Progress to Date	Status
	encourage Harvard University to incorporate publicly accessible open		
	space on Oxford Street/Divinity		
	school property.		
8	The Committee requests that		
	Harvard University landscape the		
	existing parking lot on Oxford		
	Street once underground parking is		
	constructed.		

### AREA FOUR NEIGHBORHOOD STUDY OPEN SPACE RECOMMENDATIONS

	(Original study completed 1994 Update in Progress)			
#	Recommendation Summary	Progress to Date	Status	
1	Allocate more funds towards park maintenance. The committee supports the allocation of more City resources towards park maintenance. The community also recommends that a service contract be attached to all park renovation projects in the neighborhood.	The organizational structure of the DPW Parks Department has changed in recent years to include new specialized staff positions, increased training and sector maintenance crews responsible for different districts of the City. In addition, certain parks are maintained through a private maintenance contract.		
2	Renovate Harvard Street Park. The Committee strongly recommends that Harvard Street Park be renovated as a primary priority of the open space recommendations.	Harvard Street Park was renovated in the mid-1990s. Complete redesign is planned as part of the 238 Broadway acquisition.		
3	Upgrade Area Four Community Garden on Broadway. The Committee would like to see the garden on Broadway upgraded. The improvements should include attractive fencing around the garden, better design for the individual plots, and sidewalk improvements to Boardman Street, next to the garden.	The Squirrel Brand acquisition project includes both affordable housing and a new public park that is part of the Area Four Open Space process. The housing portion of the renovation has been completed, and construction on the park is expected to begin in fall 2003. The park will include a public community garden component and passive open space.		
4	Design and Construct a Small Sitting Area in Sennott Park.  The Committee recommends the design of a sitting area within Sennott Park. The sitting area is to be located on the part of the park next to Broadway and Norfolk Street, away from abutting houses. The Committee envisions such an area to be surrounded by small hedges for a sense of enclosure, and to include sitting benches and chess	While this exact type of sitting area has not been created, Sennott Park has been periodically improved since this recommendation was made. The tot lot has been renovated and the field is now used for youth soccer during the fall and spring. The pathway from the playground to the fields has been lined with benches.  Through an allocation for water play improvements throughout the city, CDD has funds to add water play in Sennott Park. Community outreach on this matter was	In looking at the possibility of the proposed seating area, a request was made for CDD to evaluate if changes could be made to improve the pedestrian flow on the sidewalk along this edge.  In order to fund the proposed seating area	

#	Recommendation Summary	Progress to Date	Status
	tables.	conducted during summer 2003, with construction to be completed by fall 2003.	at the corner of Broadway and Norfolk Street, CDD will petition for capital funding starting in FY05. However, the possibility of obtaining this funding will depend upon the City's financial situation. CDD will also explore alternate means of funding.
5	Plant a Shade Tree in the Hampshire/Elm Sitting Area. The sitting area is not in Area Four proper, but is located in the Wellington-Harrington neighborhood. The Committee suggests the Wellington-Harrington Study Committee consider recommending planting a shade tree in the sitting area.	This shade tree was not planted because it would eliminate the existing ornamentals. However, DPW has improved the sitting area with new plantings and better maintenance.	Both the Area Four and Wellington-Harrington Neighborhood Studies mention this site for renovation. While it could be some time before funding is secured for this renovation, staff from Community Development will evaluate the potential cost and scope of the renovation.  Once funding has been secured, a community process will take place to determine what types of uses are appropriate on the site and what features the neighborhood would like to see. Other factors will influence the final design, including available funding, federal safety and accessibility standards, and the other types of open space amenities available within the neighborhood.  CDD will evaluate this space for potential overall renovation during the upcoming year, to see if it is feasible to apply for

#	Recommendation Summary	Progress to Date	Status
			capital improvement funding during FY05.
6	Explore the possibility of adding the following sites to the neighborhood's open space system. 206-210 Broadway 164 Harvard Street 197 Harvard Street All the sites are privately owned. The Committee felt that the vacant parcel at 165 Harvard Street was too small to be considered appropriate for housing. The Committee felt that 206-210 Broadway would be appropriate as open space. The Committee recommends that the Department of Public Works (DPW) should notify the owners about cleaning their property. If the owners fail to comply, DPW should clean the lots at the owners' expense	206-210 Broadway and 164 Harvard Street remain in private ownership.	197 Harvard Street will be integrated into the Area Four Open Space process (as part of the 238 Broadway renovation).
7	Schedule Street Trees for Periodic Trimming so that Tree Branches do not Obstruct Street Lights.	Most trees are trimmed on a four-year cycle in Cambridge. Area Four was pruned in 2000, and will be pruned again in 2004. The City Arborist will evaluate potentially hazardous conditions on an individual basis, and can be reached at (617) 349-6433.  Of the 12,000 street trees in Cambridge, approximately 700 are in Area Four. The Urban Forestry Division of Public Works anticipated planting 27 new trees in Area	
8	The City should continue the ongoing community process surrounding the Squirrel Brand open space.  This space should continue to have a large community garden component, while at the same time including space for members of the public (especially youth) to interact and enjoy the site.	Four by the close of FY2003.  The community process for the Squirrel Brand open space took place from May 2002- May 2003. The renovation is scheduled to begin during fall 2003. Roughly half the site will be community gardens, while the other half will include lawn and seating areas.	
9	While the final status of the 238 Broadway site has yet to be determined, any open space on the site should reflect the plan developed through the community process.	The future of the 238 Broadway site is still under discussion. However, any open space on the site will be reflective of the plan developed during the community process.	
10	Parks should be designed to encourage safety and discourage illicit activity. Existing parks	During the planning process, CDD and other departments work to create parks that encourage safety and discourage illicit	

#	Recommendation Summary	Progress to Date	Status
	should be continually monitored to ensure that they are clean, well-maintained, safe, and being used for appropriate activities. The parks can and should serve an important role in providing positive activities for youth.	activity by meeting certain standards for lighting, emergency call boxes, and general site layout. Once a park is completed, DPW works to maintain the space in order to discourage graffiti and litter from accumulating. Through the recent creation of designated sector maintenance crews (see OS 1),	
11	The City should work to more effectively link youth educational and recreational organizations to existing park and recreation facilities.		
	In order to do this, City departments concerned with these issues (including Community Development, Human Services, and Recreation) should conduct a comprehensive recreational needs analysis of local youth Increased activity should be balanced with concerns about increased noise (especially amplified) by local residents.		
12	The City should work to improve the quality of lawns and fields throughout the park system.	DPW's Division of Parks and Urban Forestry has a specialized position focused on turf management. Most renovations include completed field and drainage work, as well as irrigation.	
13	The City should establish a process for informing the public about changes in use to athletic facilities. Residents expressed concern the lack of notice about the change at Sennott Park from baseball to soccer.		

# CAMBRIDGEPORT NEIGHBORHOOD OPEN SPACE RECOMMENDATIONS (Original study completed 2000 --- Updated in 2003)

#	Recommendation Summary	Progress to Date	Status
1	The Study Committee supports the efforts of the Friends of Magazine Beach and encourages the MDC to continue their community process with respect to the redesign of the Magazine Beach facility.	In the fall of 1999, the City and the MDC reached an agreement to renovate the Magazine Beach facility. The City has agreed to provide \$1.5 million for renovations and \$100,000 annually for the maintenance and upkeep of this facility. In return, the MDC has agreed to give Cambridge youth athletic teams' priority in scheduling of games. \$1.5 million will pay for about half of what Friends of Magazine	UNDERWAY

#	Recommendation Summary	Progress to Date	Status
,	Account of the control of the contro	Beach would like to see happen at the site.  The project is moving forward in three stages due to budgetary issues. Phase 1 includes renovations to the fields.  Construction is expected to begin In the fall of 2003, and paid for through city funds.  Phase 1b is supplemental to the Department of Public Works' Sewer Outfall Project and will involve the restoration of the river edge for the length of the playing fields. Phase 2 includes site improvements to the remainder of the park including picnic areas, play area, and water play area. Funding for Phase 2 has not been secured at this time.	Status
2	The Study Committee recommends that the following parks in Cambridgeport should be zoned as Open Space: Hastings Square, Alberico Park on Allston Street, Lopez Street Tot Lot and Fullerton Park between Peters Street and Sidney Street. This change was not made in the previous citywide rezoning and this omission should be corrected.	Submit implementing zoning language to City Council in February 2003.	FUTURE ACTION ITEM
3	The Study Committee recommends that the city pursue the option of expanding the park at 82 Pacific Street to include adjacent parcels.	The City has been working with The Trust for Public Land (TPL) to explore the option of purchasing parcels abutting this park.	UNDERWAY
4	The Study Committee supports the creation of an Open Space Acquisition Trust, to be used to buy land for the sole purpose of creating more open space in Cambridge.	Since this recommendation was first put forward the City has designated more than \$2 million of City funds for purchase of open space. In addition, the Green Ribbon Committee established criteria for the purchase of land to be used as open space. In November of 2001 Cambridge voters approved the Community Preservation Act (CPA). The CPA will make a total of 13.5 million local and state dollars available during FY2002 and FY2003 for affordable housing, open space, and historic preservation in Cambridge. An appointed committee, which heard testimony given at a public hearing in April of 2002, determined that 80% of the funds from the CPA should be devoted to the creation of affordable housing, while 10% should be devoted to open space and historic preservation respectively.	NO ADDITIONAL ACTION AT THIS TIME
5	The Study Committee recommends that the city add 4 or 5 picnic tables to Dana Park.	This will be considered during the Dana Park planning process, which will take place in early 2003. Placement must be	NO ADDITIONAL ACTION AT THIS TIME

#	Recommendation Summary	Progress to Date	Status
	•	considered in context of light fixture placements, and full park design.	
6	The Study Committee recommends that DPW add bulletin boards to all the parks in Cambridgeport that don't already have them. The bulletin boards should be of a standard size and construction and resemble the one recently placed in Sennott Park in Area Four.	As part of the park renovation at Dana Park a new bulletin Board will be installed. The city standard for bulletin board designs will be used. The standard design is similar to the ones at Paine Park, Bergin Park, Sleeper Park, and the King School Park.	UNDERWAY
7	In general, there are some changes that need to be undertaken for all the parks in Cambridgeport. The Study Committee recommends that trash cans be located near entrances/exits to the park and at a minimum should be emptied weekly. In addition, it is also recommended that maintenance be improved, especially ensuring that the water fountains are in working condition. Finally, small bags should be made available for dog owners to help them clean up after their dogs.	This has been a part of DPW's work. This has been an important component of DPW's day-to-day activities.  •	UNDERWAY
8	Open space is scarce resource. Imaginative ways need to be utilized to provide both passive and active open space in the neighborhood. The Study Committee recommends that the City explore the idea of utilizing any additional space along sidewalks for the placement of benches and other amenities. Resident sponsorship of these sidewalk amenities could help to ensure that these benches would be used properly by giving local residents a sense of "ownership" in their neighborhood.	The Green Ribbon Committee report recommends expanded passive recreation opportunities at the edges of open space.  As parks are redesigned the City will consider utilizing additional space along sidewalks for benches and other amenities.	FUTURE ACTION ITEM
9	The Study Committee recommends that the city pursue the idea of requiring developers to link open spaces in urban developments to other open spaces in both the residential portion of Cambridgeport and other urban developments.	In the Citywide Rezoning Petition, passed in 2000, Project Review guidelines include open space linkage as a design objective.	COMPLETE

# EAST CAMBRIDGE NEIGHBORHOOD OPEN SPACE RECOMMENDATIONS (Original study completed 1989 --- Updated in 2001)

#	Recommendation Summary	Progress to Date	Status
1	Maximize the potential for open space at North Point and the Volpe Center.		
2	Attempt to acquire land to expand Ahern Field.		
3	Initiate a pilot program to involve residents in park beautification and maintenance. The City should work with residents by targeting one East Cambridge park and forming a neighborhood committee to implement a small-scale program.		
4	Increase the resources for recreation programming in East Cambridge parks. In addition, a summer internship program to train staff associated with the new programs.		
5	Address the problems of security and vandalism in East Cambridge parks by:		
	a) Increased police presence and lighting in the parks		
	b) Strict enforcement of the 10:00pm curfew.		
6	The newly developed East Cambridge parks should be dedicated to Luke Agnetta and Tom Walker in memory of their long and dedicated service to the community.		
7	Enhance the design of future East Cambridge park renovations by considering:		
	a) Clearly defined play areas and uses for people of different ages.		
	b) A performance area.		
	c) Better lighting.		
	d) More benches.		
	e) More trash receptacles.		
8	Post signs in East Cambridge parks to encourage residents to keep the park clean.		
9	Identify and develop areas in the neighborhood that can be used for outdoor sitting, plantings and community gardens.		

# MID-CAMBRIDGE NEIGHBORHOOD OPEN SPACE RECOMMENDATIONS (Original study completed 1996 --- Updated 2003)

		leted 1996 Updated 2003)	
#	Recommendation Summary	Progress to Date	Status
1	Use Science Center's stone fountain as a model for open space ideas that are attractive to all people and ages		
2	Support performances or activities in parks for adults during afternoons and evenings.		
3	Provide for more multiple use spaces e.g. parking garage as concert space or tennis courts.		
4	When possible create "pocket-parks"		
5	Seek land for acquisition.		
6	Provide sidewalk benches/sitting areas.		
7	Encourage private developers to create open spaces that are accessible by the public.		
8	The City should continue to acquire open space. It is particularly important to acquire spaces in locations that lack open space, such as the Longfellow School.		
9	Close Cambridge Street or Broadway at certain times to provide more recreation space. This would be similar to the occasional closures of Memorial Drive during the summer.		
10	The City should create an inventory of private open spaces. This inventory should provide an overview of which spaces are open to the public as well as those that are not open to the public but provide visual and environmental benefits to the city. It should be noted whether any of these spaces might be lost to development.		
11	Protect Joan Lorentz Park during the main library expansion. The expansion is an opportunity to look into ways of enhancing this space, such as providing benches.		
12	Provide air conditioning at War Memorial facilities.		
13	The following improvements are needed at Cooper Park: - Better enforcement of rules for appropriate use of water play		

#	Recommendation Summary	Progress to Date	Status
	equipment; - Evaluation of whether the screening effect of plant material encourages inappropriate behavior on the interior edge of the park; and, - Regular pruning and thinning of trees.		
14	Promote pedestrian and bicycle access to the Charles River. The river is the most important recreational resource available to Cambridge residents, and is difficult to access because of high traffic volumes on Memorial Drive.		
15	There should be greater enforcement of dog restrictions throughout the City's park system. Bags and trash barrels should be provided to help owners clean up after their dogs.		
16	Safety at Magazine Beach is a major concern. The City and MDC should come to agreement over whose police force has jurisdiction there, and how safety can be improved.		
17	The condition of street trees should be evaluated and improved throughout the city. In Mid-Cambridge, there is particular concern about the health of large trees on Kirkland Street.		

NEIGHBORHOOD NINE OPEN SPACE RECOMMENDATIONS (Original study completed 1995 --- Update in progress)

#	Recommendation Summary	Progress to date	Status
1	Add dog-waste receptacles in parks and along streets in the neighborhood		
2	Encourage the creation of an "Adopt-A-Park" program in neighborhood parks.		
3	Neighborhood organizations and residents groups should organize a neighborhood clean-up day in conjunction with the Department of Public Works.		
4	Encourage neighborhood organizations and residents groups to organize a trustee's organization for the major parks in the neighborhood. (These organizations would serve as conduits to raise funds on a charitable basis to		

#	Recommendation Summary	Progress to date	Status
	enhance the utility and aesthetic quality	- Company of the comp	
	of the parks.)		
5	Study current policy of scheduling adult leagues in City fields/parks.		
6	Convert open lot next to railroad tracks at Walden Square into a passive park along with the renovation of the tunnel.		
7	Add dog-waste receptacles in parks and along streets in the neighborhood		

# NORTH CAMBRIDGE NEIGHBORHOOD OPEN SPACE RECOMMENDATIONS (Original study completed 1990 --- Update planned for 2004)

	(OII) DOWN COMPICE	1990 Update planned for 20	0 1 /
#	Recommendation Summary	Progress to date	Status
1	Undertake a thorough open space plan for North Cambridge to establish future open space and recreational priorities. The plan should:		
	<ul> <li>a) Document the types of open space uses which exist in the neighborhood;</li> </ul>		
	<ul> <li>b) Determine whether this amount and mix is appropriate given the current and projected demographic composition of the neighborhood.</li> </ul>		
	Recommend ways to create additional open spaces and community gardens in North Cambridge; encourage landscaping tree planting, and sitting areas throughout the neighborhood, and ensure that all residents have access to the type of open space that meets their needs.		
2	Expand the Community Development Department's outreach process to encourage community involvement during the park planning and design stages. The following are some suggestions for ways to improve the participation process:		
	1 Encourage park users (children, teenagers, adults, and other persons) to participate in all phases of planning, design and maintenance;  2 Make the process as creative and		

#	Recommendation Summary	Progress to date	Status
	fun as possible;		
	3 Place signs in parks inviting people to attend meetings when any kinds of park renovations are planned.		
3	Continue to work with the Commission on Handicapped Persons and area residents to ensure that those people with special needs have sufficient amounts of recreation areas and equipment accessible to them.		
4	Increase the level of safety so that residents, particularly older people, feel safe using the parks.		
5	Improve safety in Linear Park by keeping it better maintained, including shoveling the snow and ice in the winter and repairing light fixtures when necessary.		
6	Investigate potential funding sources to allow the Committee on Public Planting to purchase more trees for North Cambridge streets.		
7	Encourage the establishment of an ongoing program for the maintenance and grooming of City trees and public plantings.		

# RIVERSIDE NEIGHBORHOOD OPEN SPACE RECOMMENDATIONS (Original study completed 1993 --- Updated 2003)

Progress to date Status **Recommendation Summary** Record successful and unsuccessful park designs, programming and maintenance efforts to establish a centralized record of what works and what does not work. The record could become a resource for community groups during the initial planning process. Full design development of a park will be the responsibility of the City's landscape architect. 2 Increase police sweeps and surveillance of all parks to promote responsible use of parks and to deter crime and disturbances from occurring. 3 Include resources for maintenance in new capital projects and add conditions

#	Recommendation Summary	Progress to date	Status
,,	to construction contracts that would	22000 10 44110	Destrub.
	provide for follow-up maintenance.		
4	Require long-term maintenance on new capital projects:		
	<ul> <li>a) The City should adopt a         policy that would mandate         that funds be set aside in its         budget for maintenance of         capital projects; and</li> </ul>		
	b) In the absence of sufficient maintenance resources, capital funds could be used to stockpile spare parts, if sufficient city storage space is available.		
5	Involve schools in the maintenance of playgrounds. Schools could create a program which involves the students in the maintenance of parks and playgrounds. The program should emphasize the students' partnership with their neighborhood.		
6	Tie maintenance schedule to level of use.		
7	Inspect parks on a regular basis. Inspectors must be well qualified and have product (equipment) knowledge, as called for in the City's Open Space Plan.		
8	Include maintenance training for park inspectors and maintenance personnel in capital investment, as called for in the City's Open Space Plan. Future hires should be qualified maintenance workers.		
9	Design parks and open space with both maintenance and aesthetics in mind.  Design features of new projects should be aesthetically pleasing and lend themselves to easy maintenance		
10	Design open spaces and parks to reflect use and programming. As outlined in the City's Open Space Plan, users should be identified, and programming should be reflective of their needs.		
11	Explore ways to increase programming for indoor recreational activities.		
12	Develop programming to meet the		

#	Recommendation Summary	Progress to date	Status
	needs of the elderly and female populations. This in light of a gender and age bias perceived in current	· ·	
	programming.		
13	Integrate city programming with private facilities. Look for opportunities in private facilities to provide city-sponsored outreach.		
14	Explore creative ways to staff parks, such as partnerships with universities, to place students in parks to provide active and involved personnel at parks and teen facilities.		
15	Riverside residents should form a neighborhood group to review the conditions of the neighborhood's parks and open space each year and submit this report along with recommendations for future actions to the City Council and City Manager each year. This oversight of the neighborhood's parks and open spaces will become a permanent part of the group's agenda.		

STRAWBERRY HILL NEIGHBORHOOD OPEN SPACE RECOMMENDATIONS (Original study complete 1999 --- Update planned 2003)

#	Recommendation Summary	Progress to date	Status
1	Preserve green space in residential areas.		
2	Create green open space by establishing a linear park on existing Boston an Maine Railroad, Watertown Branch, right-of-way.		
3	Connect open spaces from Fresh Pond to the Charles River.		
4	Improve current recreational facilities located in the neighborhood:		
	a) Recondition Glacken Field		
	b) Maintain existing bleachers at Glacken Field		
	c) Maintain tot lot equipment and		
	d) Surfaces at Glacken Field		
	e) Repair, upgrade, and maintain tennis courts		

#	Recommendation Summary	Progress to date	Status
5	Maintain wooded area of Fresh Pond		

# WELLINGTON HARRINGTON NEIGHBORHOOD OPEN SPACE RECOMMENDATIONS (Original study complete 1994 - Update in progress)

#	Recommendation Summary	Progress to date	Status
1	Recommendation Summary  The City should commit itself to increasing open space in Wellington-Harrington through purchasing land and developing parks and playgrounds whenever opportunities exist.  The Committee felt that the need for open space is more acute between Prospect and Columbia Streets and from Hampshire Street to the Somerville line.	In 2000, the Report of the Green Ribbon Open Space Committee was published, which used a variety of criteria to set priorities for open space acquisition throughout Cambridge. Wellington-Harrington was found to be deficient in many types of open space, especially near Inman Square. While existing land uses and the cost of land make acquisition difficult, it is important that the City continue to look for opportunities to acquire open space in the neighborhood whenever possible. In addition to acquiring new parks, there are other ways to enhance the sense of open space within the neighborhood. This includes reclaiming small "pocket parks" throughout the neighborhood, as is being done through the Cambridge Street renovation (with improvements planned for the space next to Valente Library and the Miller's River seating area). In addition, existing parks must be enhanced. To this end, Warren Pals Park was completely renovated during the past decade and will get upgraded water play equipment during summer 2003. Donnelly Field has had a playground renovation and the addition of the Frisoli Youth Center, and will have a major field renovation during summer or fall 2003.  Another solution is to create new open spaces near the neighborhood (either through acquisition or open space requirements for new development) that can be accessed easily by neighborhood residents. Several opportunities for this exist, including the redevelopment of North Point and the ongoing feasibility study of the Grand Junction Railroad for a multi-use path.	UNDERWAY
2	The Elm Street Park/Hampshire Street sitting area should be redesigned to incorporate an active playground for children.	Both the Wellington-Harrington and Area Four Neighborhood Studies mention this site for renovation. While it could be some time before funding is secured for this renovation, staff from Community	NO ACTION TO DATE

#	Recommendation Summary	Progress to date	Status
77	The Committee recommends that the new sitting area include fencing and benches to make the space more inviting. A new shade tree and water fountain should be added. The Committee suggests that a neighborhood workshop be conducted around the redesign of the space.	Development will begin to think about the potential cost and scope of the renovation.  Once funding has been secured, a community process will take place to determine what types of uses are appropriate on the site and what features the neighborhood would like to see. Other factors will influence the final design, including available funding, federal safety and accessibility standards, and the other	Status
3	The City should allocate more funds towards park maintenance and attach a service contract to all newly constructed parks.	types of open space amenities available within the neighborhood.  Since the Wellington-Harrington Neighborhood Study was completed, many changes have been made within the Department of Public Works (DPW) park maintenance program. The City's parks are now divided into three sectors, each of which has a dedicated crew and supervisor. The Division of Urban Park and Forestry now has additional specialized positions (such as an arborist). Private service contracts are attached to	UNDERWAY
		certain parks. These contracts are not necessarily tied to renovations.  If residents notice a maintenance problem at a specific park, they should call the DPW Parks Hotline at (617) 349-6434.	UNDERWAY:
4	Redesign Donnelly Field for better definition of play spaces	Since the original neighborhood study, the Donnelly Field Playground was renovated and the Frisoli Youth Center constructed. Public meetings and plans for the renovation of the field were completed in early 2003, with construction planned for summer or fall 2003. Planned improvements include: improved lighting; better turf and drainage in the outfield; new bleachers, seating, and picnic areas; better baseball, softball, and basketball amenities; improved plantings, pathways, and entrances; and, seasonal portable toilets	
5	Upgrade and better maintenance of Gold Star Mother's Pool.  The Committee recommends that the pool should be enclosed to allow use		NO ADDITIONAL ACTION PLANNED AT THIS TIME
	throughout the year.		
6	Street trees should be planted on Cambridge Street, Columbia Street, and on Norfolk Street in the area abutting the DPW site.	While there has been some increase in the size and number of trees in the area since the original neighborhood study, any long-term improvements to the site will not be	NO ADDITIONAL ACTION PLANNED AT THIS TIME

#	Recommendation Summary	Progress to date	Status
n e	Accommendation Summery	made until it is determined whether DPW is moving to a new location and what new use will occupy the Hampshire Street site.	
7	Street cleaning on Cambridge Street should be done more frequently, particularly around bars and restaurants	: DPW's street cleaning program includes monthly sweeping of all street from April-December, as well as more frequent treatment of major squares. Daily hand-vacuuming and litter collection is done in major squares.	UNDERWAY
8	The City should create play spaces for older children, rather than focusing exclusively on tot lots. One recreation resource that is needed is a skateboard park.		IMPLEMENTATION STILL UNDER EVALUATION
9	The Department of Transportation Building site in East Cambridge could provide an opportunity to create new open space		IMPLEMENTATION STILL UNDER EVALUATION.
10	The City should create good pathways to existing and future open spaces that border Wellington-Harrington, like North Point's parks and Grand Junction Railway linear park.		IMPLEMENTATION STILL UNDER EVALUATION.
11	The City should look for opportunities to renovate small pocket parks whenever possible. Some sites that might be renovated include:  • The corner of Windsor and Lincoln Streets  • The corner of Windsor and Hampshire Streets  • The corner of Webster Avenue and Hampshire Streets (across from the CDM building)  • The old trucking company site on Binney Street		IMPLEMENTATION STILL UNDER EVALUATION.
	Site on Winter Street (in East Cambridge)		
12	The City should acquire land across the street from the Kennedy School's Ahern Field. While not located in the Wellington-Harrington neighborhood but in nearby East Cambridge, this is an important open space for a large number of students and local residents.		IMPLEMENTATION STILL UNDER EVALUATION

#### SECTION 9 FIVE-YEAR ACTION PLAN

The City of Cambridge Open Space Action Plan for 2002 – 2008 is divided into eight categories: City Parks and Playgrounds; Public-Private Partnerships; Natural Resources / Watershed Protection; Recreational Facilities; Programs; Maintenance and Operation; Information and Communication; Planning and Organization.

Within each category, there is a set of category-specific objectives, summarized below, and a set of planned (or recently completed) actions, listed on the following pages. The category-specific objectives are based on collected information from the sources noted in Section 8. The action items are ordered according to their anticipated timetables, though the timetable for each future action is subject to change.

#### **Objectives by Category**

#### **City Parks and Playgrounds**

- Increase the amount and variety of play opportunities and open space experiences available throughout the city.
- Create new open spaces and new play opportunities in those areas identified as "Top Priorities" for tot lots, neighborhood parks, and community parks in the *Report of the Green Ribbon Open Space Committee* (2000).
- Improve the condition of existing playgrounds and parks, with a focus on universal design and access for persons with disabilities.
- Replace pressure treated wood play structures with metal/plastic structures in children's playgrounds and tot lots.
- Identify and improve small, under-utilized open spaces for use as passive recreational areas or "pocket parks".

#### **Public-Private Partnerships**

• Increase the amount of public open space in Cambridge by encouraging private developers to create new open spaces as part of large development projects.

#### **Natural Resources / Watershed Protection**

- Implement the priority recommendations of the Fresh Pond Master Plan for Fresh Pond Reservation.
- Acquire land within the watershed in order to protect the quantity and quality of Cambridge's water supply, to increase the quality of life for Cambridge residents and support economic growth over the long term.
- Allow natural resource areas to be used by the public for limited recreational activities while working to ensure their protection and maintenance.

#### **Recreational Facilities**

- Maintain the city's current system of recreational facilities in good condition, including athletic fields, swimming pools, the municipal golf course, and other facilities.
- Provide new recreational opportunities that will increase the diversity of user groups that are served (for example, a skate park that would provide a new recreational opportunity for older youth and teenagers). Focus on potential user groups of all ages and abilities.

#### **Programs**

- Support a robust recreational program that makes use of Cambridge's recreational facilities.
- Develop sports and recreational programs specifically for youth.
- Develop new inclusionary programming for special needs children in all recreational activities.

#### **Maintenance and Operation**

- Work to beautify all public open spaces.
- Plant and maintain trees on streets and in public parks.
- Allow residents to play an active role in the ongoing upkeep of neighborhood parks.

#### **Information and Communication**

• Develop new resources to provide the public with information about Cambridge's open space system.

#### **Planning and Organization**

- Establish systems for tracking goals and objectives related to open space that appear in studies and reports developed by city departments. Incorporate items into work plans.
- Continue to develop new strategies for funding open space acquisition and improvements.
- Continue to improve the open space planning function of the Open Space Committee.

### **City Parks and Playgrounds**

- Increase the amount and variety of play opportunities and open space experiences available throughout the city.
- Create new open spaces and new play opportunities in those areas identified as "Top Priorities" for tot lots, neighborhood parks, and community parks in the *Report of the Green Ribbon Open Space Committee* (2000).
- Improve the condition of existing playgrounds and parks, with a focus on universal design and access for persons with disabilities.
- Replace pressure treated wood play structures with metal/plastic structures in children's playgrounds and tot lots.
- Identify and improve small, under-utilized open spaces for use as passive recreational areas or "pocket parks".

ACTION	TIMELINE
<b>Paine Park Improvements:</b> Full park renovation including two play areas for younger and older children, water play, half-court basketball area, benches, tables, public art, plantings, upgrades to lighting.	Completed 2002
<b>King School Playground Improvements:</b> Addition of two new play structures for younger and older children, with a small multi-use artificial turf area and other overall improvements.	Completed 2002
<b>Bergin Park Improvements:</b> Full park renovation including new play structure and water play, lighting, benches, tables, signage, fences. Also included resurfacing and lighting replacement at tennis courts.	Completed 2002
Maynard School Playground Improvements: Installation of new playground equipment.	Completed 2002
<b>Lopez Street Park Improvements:</b> Full park renovation including the replacement of wood play structure with metal/plastic play equipment.	Completed 2003
<b>Franklin Street Park Improvements:</b> Full park renovation including landscaping, public art, water play.	Completed 2003
Water Play Modernization: Upgrades to water play equipment at Hoyt Field, Paine Park, Sennott Park, and Warren Pals Park.	Completed 2004
<b>Monagle Plaza Improvements:</b> Upgrades to an adjacent sitting area as part of the renovation of a municipal office building.	Completed 2004
Maple Avenue Park Improvements: Full park renovations including replacement of play equipment, water play, seating area, landscaping.	Completed 2004
<b>Squirrel Brand Park Construction:</b> Creation of a public park on a parcel of land adjacent to a municipally-sponsored affordable housing rehabilitation project in an area identified in the <i>Green Ribbon</i> report as a "Top Priority" for the creation of new community parks. This new park includes a sitting area, water play, and community gardens.	Completed 2004
<b>Lowell School Park Improvements:</b> Full park renovation including new playground equipment, basketball area, seating, water fountain.	Completed 2004
<b>Dana Park Improvements:</b> Full park renovation including new playground equipment, basketball court, seating area.	Completed 2004
Cambridge Street Pocket Parks: As part of a roadway and sidewalk reconstruction project, improvements were made to three small sitting areas along the street, adjacent to Inman Square (Vellucci Community Plaza) the Valente Library, the Millers River housing complex.	Completed 2004

Harvard Street Park / 238 Broadway Expansion: Acquisition of a vacant office complex to be converted to open space in a part of the city identified in the <i>Green Ribbon</i> report as a "Top Priority" for the creation of new community parks. The new space will complement an existing, adjacent park, resulting in a larger park that will include an open field area, sitting area, playground, and tennis court.	Property acquired 1999 Design completed 2002 Construction expected 2005
Charles Park Playground Replacement: Replacement of existing wood play structure with a new metal/plastic structure.	Replacement expected 2005
<b>Library Park Reconfiguration:</b> Expansion of the main branch of the Cambridge Public Library will include a reconfiguration of the adjacent green area and "tot lot" playground.	Planning in progress Construction expected 2005
<b>Gold Star Mothers Park Improvements:</b> Replacement of pressure treated wood play structure with metal/plastic play equipment, addition of lighting and improvements along pathways.	Design expected to begin 2005 Construction expected 2005-06
<b>Tobin School / Father Callahan Playground Improvements:</b> Replacement of play structure, upgrades to basketball court.	Design expected to begin 2005 Construction expected 2005–06
<b>Agassiz/Alden Park Improvements:</b> Replacement of pressure treated wood play structure with metal/plastic play equipment.	Design expected to begin 2005 Construction expected 2006
Pacific Street Park Improvements: Development of green space to include seating area, play equipment, and multi-use playing field.	Conceptual design underway Detailed design expected 2005-06
<b>Cambridge Common Improvements:</b> Replacement of wood play structure, along with improvements to pathways, drainage, lighting, and plantings, and accessibility improvements.	Detailed design expected 2005–06
<b>Costa Lopez Taylor Park Improvements:</b> Development of an adjacent vacant parcel to be used as a passive "pocket park" area. Possible installation of new lighting at main park.	Design expected to begin 2005
<b>Trolley Square Park Construction:</b> A public park with sitting area adjacent to a municipally-sponsored affordable housing development project. This park will be connected to the existing "Linear Park" in North Cambridge.	Design expected to begin 2005–06
<b>Broadway and Norfolk "Pocket Park":</b> A neighborhood study recommends redesigning this corner, currently part of Sennott Park, for use as a passive sitting area.	Planning 2005–08
Additional Wood Playground Replacement: Due to health concerns regarding the use of pressure treated lumber in children's play equipment, Cambridge is in the process of replacing all of its wood-built playgrounds with equipment made of plastic, metal, rubber, and other materials. Besides the projects listed, playground replacement is planned at Alberico Park, Clement G. Morgan Park, David Nunes Park, Fulmore Park.	Planning 2006–08
Sacramento Field Improvements: Recommended in Neighborhood Studies.  Scope and feasibility of improvements will be investigated in the future.	Planning 2006–08
<b>Elm / Hampshire Plaza Improvements:</b> Recommended in Neighborhood Studies. Scope and feasibility of improvements will be investigated in the future.	Planning 2007–08

## **Public-Private Partnerships**

## **OBJECTIVES**

• Increase the amount of public open space in Cambridge by encouraging private developers to create new open spaces as part of large development projects.

spaces as part of range development projects.			
ACTION	TIMELINE		
North Point Open Space: Developers of the Planned Unit Development (PUD) district in East Cambridge called "North Point" have committed, through a special permit granted in 2003, to develop an approximately five-acre public park as part of that new district.	Design expected complete 2005–06		
Memorial Drive and Western Avenue (Mahoney's Garden Site): As a result of negotiations involving Harvard University, the City of Cambridge, and residents of the Riverside neighborhood, Harvard has agreed to donate a parcel of land to be used as public recreational open space in an area where it is planning to develop student housing facilities.	Design expected to begin 2005		
<b>Porter Square Vicinity Open Space:</b> The area around Porter Square is identified as a "Top Priority" area for the creation of "tot lot" playgrounds and community parks. Cambridge will continue to work with developers and institutions in the area to incorporate open space and recreational facilities into future development.	Planning 2004–08		
<b>Kendall Square Open Space:</b> The City of Cambridge has developed a set of Planned Unit Development (PUD) guidelines to shape future development in a district adjacent to Kendall Square. As a result, a developer who wishes to undertake a PUD within this district is required to construct an approximately seven-acre public park in that area. To date, most of the land within this PUD district is owned by the federal government, which currently has no plan to develop or sell its property.	Timeline unknown		
<b>Design Review Guidelines:</b> Certain large projects in Cambridge are required to undergo a design review, sometimes as a requirement for receiving a special permit from the Planning Board. Within a design review, projects are evaluated on the basis of "Citywide Urban Design Objectives (defined in section 19.30 of the Cambridge Zoning Ordinance) one of which states that "Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city" (19.34). To date, over seventeen private development projects have included publicly-accessible open spaces as the result of a special permit design review.	Ongoing on project-by-project basis		

## **Natural Resources / Watershed Protection**

- Implement the priority recommendations of the Fresh Pond Master Plan for Fresh Pond Reservation.
- Acquire land within the watershed in order to protect the quantity and quality of Cambridge's water supply, to increase the quality of life for Cambridge residents and support economic growth over the long term.
- Allow natural resource areas to be used by the public for limited recreational activities while working to ensure their protection and maintenance.

ACTION	TIMELINE
Northeast Sector Project: A high priority in the Fresh Pond Master Plan. Involves the reconstruction of pathways and the reorganization of spaces, which include a youth soccer playing field, community gardens, passive use areas, and a small parking lot. Project will improve stormwater management and landscape protection.	Design expected complete 2005 Construction expected complete 2006
<b>Little Fresh Pond Shoreline Restoration:</b> A high priority in the Fresh Pond Master Plan. Involves the restoration of a shoreline that has eroded due partly to pathway use and invasive species. Pathways will be reconstructed.	Design expected complete 2005 Construction expected complete 2006
<b>Kingsley Park Restoration:</b> A priority in the Fresh Pond Master Plan. Involves shoreline restoration and pathway reconstruction for a park and play area that is adjacent to Fresh Pond.	Schematic design expected complete 2005 Construction to occur in phases 2005–08
<b>Black's Nook Restoration:</b> A priority in the Fresh Pond Master Plan. Involves shoreline reconstruction and landscape improvements.	Design expected complete 2006 Construction to occur in phases 2006–08
Harrington Property Acquisition: Involves the purchase of 16 acres of watershed land in the Towns of Lincoln and Weston, and the creation of a land use plan to protect the property from development and allow recreational use by the public.	Purchase expected complete 2005 Land use plan expected complete 2005 Implementation expected by 2006
Watershed Land Acquisition Strategy: Cambridge expects to develop a long-term strategy to acquire land in the watershed, with the purpose of protecting watershed areas from development and/or pollution, maintaining natural and man-made infrastructure (shorelines, wetlands, dams, &c.). Land acquisition priorities will be based on proximity to reservoirs and tributaries, imminent risk of development, local community support, cost of acquisition and ownership, and additional considerations such as recreational benefits for the public.	Planning began 2002 Strategy expected complete 2005 Implementation expected by 2006

#### **Recreational Facilities**

- Maintain the city's current system of recreational facilities in good condition, including athletic fields, swimming pools, the municipal golf course, and other facilities.
- Provide new recreational opportunities that will increase the diversity of user groups that are served (for
  example, a skate park that would provide a new recreational opportunity for older youth and teenagers). Focus
  on potential user groups of all ages and abilities.

ACTION	TIMELINE
Thomas P. O'Neill, Jr. Municipal Golf Course Improvements: Improvements to tee areas, bunkers, pathways, and buffer zones.	Completed 2002
<b>Donnelly Field Improvements:</b> A full renovation of this facility included new playing fields for Little League baseball with new bleachers and dugouts, and upgrades to the softball field, basketball courts, and playground.	Completed 2004
Russell Field Improvements: A full renovation of Cambridge's main facility for high school football games, including upgrades to the field, a new field house, bleachers, and press box. Also includes renovations to baseball fields (Comeau Field, Samp Field), two new multi-use grass fields, a new "tot lot" playground, and a renovated parking lot.	Construction started 2004 Construction expected complete 2005
Magazine Beach Renovations: This state-owned complex of playing fields is managed by the Department of Conservation and Recreation. The City of Cambridge is funding part of the renovations and ongoing maintenance of this facility, and in exchange, priority will be given to Cambridge youth athletic teams in scheduling use of the playing fields.	Construction expected to begin 2005
<b>Skate Park:</b> A new outdoor facility for skateboarding/inline skating will be created at Danehy Park.	Construction permitting underway
Gold Star Mothers Pool Renovations: Will include replacement of all pool systems and the pool surface, improvements to circulation by users within the complex, upgrades to meet Americans with Disabilities Act (ADA) compliance, renovations to the plumbing and electrical systems, and possibly the construction of amenities such as spray pools and additional seating.	Design expected complete 2005 Construction expected 2005–06
<b>War Memorial Renovations:</b> This athletics/recreational facility is associated with the Cambridge Rindge and Latin High School but has programs open to Cambridge residents as well. Improvements will include upgrades to the HVAC systems.	Expected 2006–08
<b>Dog Runs:</b> Working through a series of public meetings and a committee of residents, Cambridge is exploring the possibility of establishing park areas where dog owners are allowed to run their dogs off-leash.	Planning underway

## **Programs**

#### **OBJECTIVES**

- Support a robust recreational program that makes use of Cambridge's recreational facilities.
- Develop sports and recreational programs specifically for youth.
- Develop new inclusionary programming for special needs children in all recreational activities.

ACTION	TIMELINE
<b>Golf Programs:</b> The amount of golf league play at the Thomas P. O'Neill Municipal Golf Course will be reduced to allow greater use by Cambridge residents.	Changes implemented 2004
<b>Junior Golf Program:</b> The Recreation Division will expand Cambridge's junior golf program to include weekly lessons and two four-week camps.	Programs implemented 2004
Swimming Programs: Membership survey to be conducted.	Expected for 2005
<b>Inclusionary Programs:</b> Development and implementation of inclusionary programming in all "out of school time" programs, such as child care, community schools, recreation/sports, and youth activities.	Ongoing 2005–08

## **Maintenance and Operation**

- Work to beautify all public open spaces.
- Plant and maintain trees on streets and in public parks.
- Allow residents to play an active role in the ongoing upkeep and programming of neighborhood parks.

ACTION	TIMELINE
<b>Beautification:</b> Through its annually-funded beautification program, the Cambridge Department of Public Works provides colorful plantings at high-visibility sites throughout the City on a seasonal basis, and enhances a limited number of previously vacant parcels within the open space inventory such as traffic islands. Enhancements might include the introduction of irrigation, park furniture where appropriate, and perennial landscaping.	Ongoing 2002–2008
<b>Tree Planting and Maintenance:</b> The Cambridge Department of Public Works has initiated a citywide tree maintenance program to include pruning of every tree on City-owned property every five to six years. With nearly 15,000 public trees, this translates to pruning almost 3,000 trees each year. The City also works to plant 150 – 300 new trees each year.	Ongoing 2002–2008
Adopt-A-Park Program: The City is considering piloting an "Adopt-A-Park" program, which will allow community members to oversee and participate in the maintenance and programming of park spaces. The first step will be to establish guidelines defining the roles and responsibilities of "Adopt-A-Park" groups.	Pilot expected for 2005

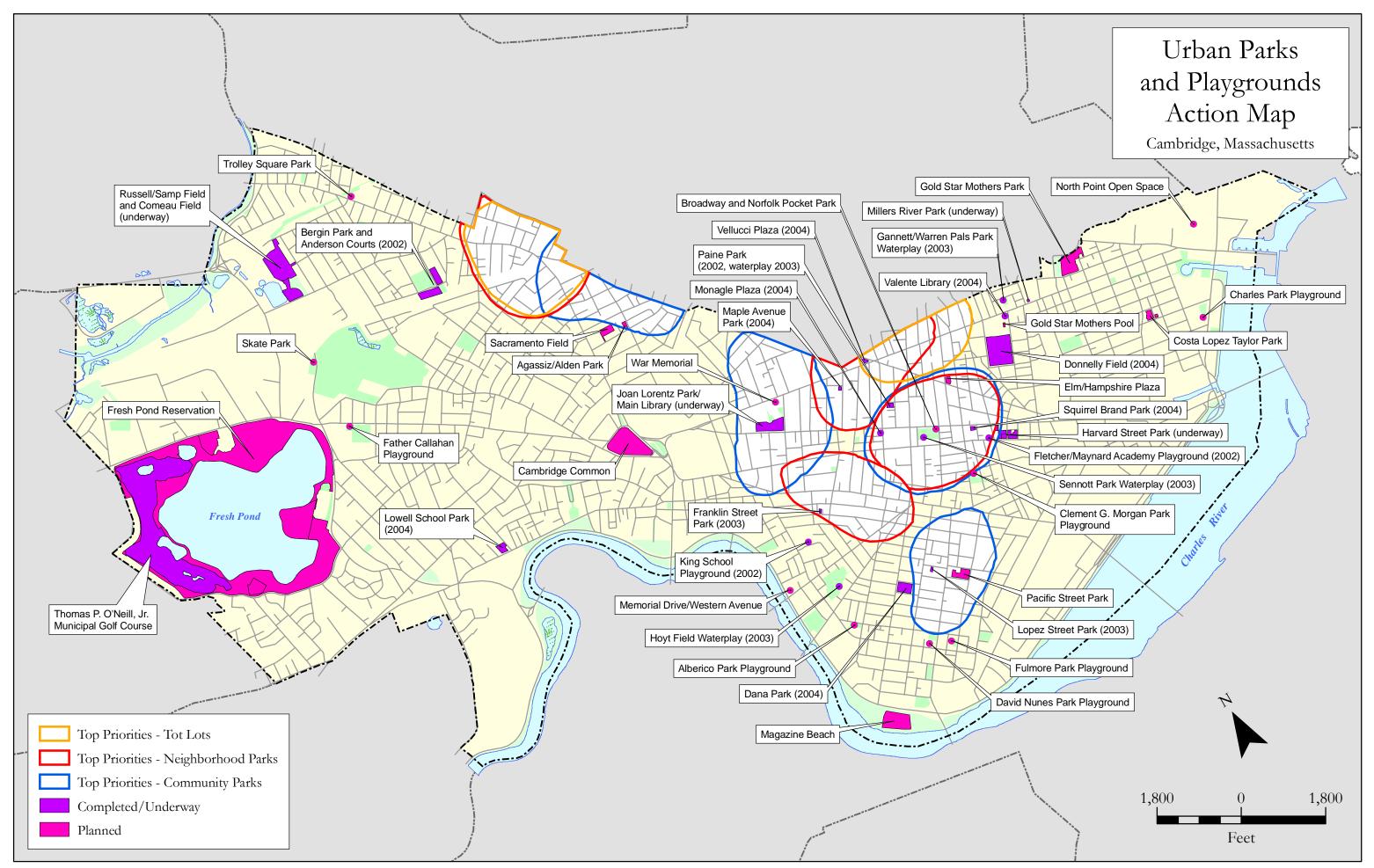
#### **Information and Communication**

OBJECTIVES  • Develop new resources to provide the public with information about Cambridge's open space system.				
ACTION	TIMELINE			
Map of Public Parks, Playgrounds, and Reservations: An 11" by 17" paper map that shows the locations of all public open space and recreation resources in the city, along with an information chart on the back detailing what kinds of facilities are available at each location. Distributed in civic and municipal buildings around the city.	Pilot version released 2004 Updates ongoing 2004–08			
Online Parks Database: A web-based system where members of the public can find a range of information about the city's entire open space system.	Planned to begin 2005–06			

## **Organization and Planning**

- Establish systems for tracking goals and objectives related to open space that appear in studies and reports developed by city departments. Incorporate items into work plans.
- Continue to develop new strategies for funding open space acquisition and improvements.
- Continue to improve the open space planning function of the Open Space Committee.

ACTION	TIMELINE
<b>Neighborhood Studies and Updates:</b> Neighborhood studies are the ongoing process by which Cambridge assesses the future planning goals of residents, businesses, and institutions in each neighborhood of the city. Open space is a major focus of these studies. Neighborhood studies have been conducted for most of the city's neighborhoods, and they are updated on a three-to-four year cycle.	One neighborhood study underway Updates ongoing 2004–08 (4 updates completed 2004–05) (3 updates planned for 2005–06)
Neighborhood Study Implementation: The Community Development Department, which conducts neighborhood studies, has introduced a new system for tracking neighborhood study recommendations and related actions from the planning phase to completion. Through this system, open space recommendations are relayed to the Open Space Committee and to the various city departments responsible for their implementation.	Ongoing as of 2004
Community Preservation Act: City Departments and the Open Space Committee will develop goals and strategies for the use of CPA funding to acquire, develop, and maintain open space resources in the city. Thus far, CPA funding has been used for projects in the Fresh Pond Reservation and for the protection of properties in the upland watershed (see "Natural Resources / Watershed Protection"). Future use of CPA funding may include the acquisition of land for public community gardens.	Ongoing as of 2003
<b>Open Space Plan Updates:</b> The Open Space Committee will continue to review the Open Space Action Plan on an annual basis. This review will be done in such a way as to coordinate with the city's budgeting cycle.	Ongoing as of 2005



#### SECTION 10 PUBLIC COMMENTS

Copies of this plan were distributed to the Mayor of the City of Cambridge, the Cambridge Planning Board, the Cambridge Conservation Commission, and the Metropolitan Area Planning Council in April, 2005. Their comments have been included.

#### SECTION 11 REFERENCES

City of Cambridge Neighborhood Studies.

Agassiz (in progress)

Area Four (1994)

Cambridgeport (2000)

East Cambridge (1989)

Mid-Cambridge (1996)

Neighborhood 9 (1995)

North Cambridge (1990)

Riverside (1993)

Strawberry Hill (1999)

Wellington-Harrington (1994)

City of Cambridge Website.

Fresh Pond Master Plan.

Massachusetts Department of Housing and Community Development Community Profile.

MWRA. City of Cambridge Water Report for the 2000 Reporting Period.

Report of the Green Ribbon Open Space Committee. (2000)

APPENDIX: FINAL REPORT, 2002 CAMBRIDGE OPEN SPACE AND RECREATION SURVEY



# OFFICE OF THE MAYOR

April 25, 2005

Jennifer Soper Executive Office of Environmental Affairs 100 Cambridge Street, 9<sup>th</sup> Floor Boston, MA 02114

Dear Ms. Soper,

I am pleased to inform you that I have reviewed the Cambridge Open Space and Recreation Plan Draft, as required by the Executive Office of Environmental Affairs. I have found that this plan provides an appropriate framework for addressing the future needs of Cambridge's open space and recreation system, including the creation of new open space resources and the preservation and maintenance of existing resources.

The City of Cambridge recognizes the important role that open space plays in supporting community health and vitality, and has consistently worked to provide its residents with an open space system of the highest quality.

Sincerely.

Michael A. Sullivan

Mayor



## CITY OF CAMBRIDGE

57 INMAN STREET, CAMBRIDGE, MA 02139 • TEL (617) 349-4680

#### CONSERVATION COMMISSION

May 5, 2005

Ms. Jennifer Soper Executive Office of Environmental Affairs Commonwealth of Massachusetts 100 Cambridge Street, 9<sup>th</sup> Floor Boston, Massachusetts 02114

Re: City of Cambridge 5-year Open Space Plan

Ms. Soper:

As required by your office, this letter is to notify you that the Cambridge Conservation Commission has reviewed the 5-year Open Space and Recreation Plan. The Commission has made the following comments:

- Create and preserve community gardens throughout the city.
- Identify areas to acquire open space throughout the city as well as within the watershed's areas of concern.
- Support the thoughtful creation and preservation of water dependent activities and uses.
- Support the preservation and enhancement of ecological habitats.

Respectfully submitted for the Conservation Commission,

Jennifer Wright, Director



## CITY OF CAMBRIDGE, MASSACHUSETTS

## PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

April 25, 2005

Jennifer Soper Executive Office of Environmental Affairs 100 Cambridge Street, 9<sup>th</sup> Floor Boston, MA 02114

Dear Ms. Soper,

This letter is to inform you that the Cambridge Planning Board has reviewed the Cambridge Open Space and Recreation Plan Draft, as required by the Executive Office of Environmental Affairs.

In response to the submitted plan, Planning Board members have made the following comments:

- Track the preservation of privately-owned, publicly-accessible open space, in addition to publicly-owned open space.
- Create and preserve community gardens throughout the city.
- Support the creation of a "stormwater retention park" as recommended in the Concord-Alewife Planning Study (recently completed by the city's Community Development Department).
- Identify strategies to acquire open space in identified "Areas of Need," such as the area around Porter Square in northern Cambridge.
- Identify and list funding mechanisms (such as the Community Preservation Act) that might aid in the acquisition and development of new open space resources.
- Improve public information on privately-owned open space that has been designated, through the Planning Board's special permit process, as publicly-beneficial open space.
- Update the Planning Board regularly on progress in fulfilling the open space needs identified in the plan.

Respectfully submitted for the Planning Board,

rbus Shaw(Enr)

Barbara Shaw, Chair



# Metropolitan Area Planning Council

60 Temple Place, Boston, Massachusetts 02111 617-451-2770 fax 617-482-7185 www.mapc.org

Serving 101 cities and towns in metropolitan Boston

May 3, 2005

Stuart Dash Director of Community Planning City of Cambridge 344 Broadway Cambridge, MA 02139

Dear Mr. Dash:

The Metropolitan Area Planning Council has reviewed the City of Cambridge Open Space and Recreation Plan 2003-2008, Update March 2005. The plan is thorough and appears to meet most of the guidelines of the Division of Conservation Services. I would like to offer the following comments to help strengthen the plan.

Subregion – Within the discussion of the regional context, it should be noted that Cambridge is a member of the Inner Core Committee, one of eight MAPC subregions. The Inner Core Committee is a group of communities that meet regularly and is an excellent forum for discussing regional open space issues and opportunities.

Metropolitan District Commission – Throughout the plan, there are numerous references to the MDC. Since the MDC was eliminated several years ago, the plan should be updated so that the references to the MDC are replaced with references to the Division of Conservation and Recreation (DCR).

Areas of Critical Environmental Concern – The term "Area of Critical Environmental Concern" (ACEC) is used on Page 42 but its usage appears to be incorrect. The plan identifies several areas that are of environmental concern, but the term ACEC should not be used because it refers to a specific statewide program rather than a generic description of sensitive environmental areas as described on Page 42.

Thank you for the opportunity to review this plan.

Sincerely,

Marc D. Draisen, Executive Director

Cc: Jennifer Soper, Division of Conservation Services

Susanne Rasmussen, MAPC Representative, City of Cambridge

Richard A. Dimino, President

Gordon Feltman, Vice President

Grace S. Shepard, Treasurer

Jeanne E. Richardson, Secretary



# The Commonwealth of Massachusetts Executive Office of Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114-2524

MITT ROMNEY
GOVERNOR
KERRY HEALEY
LIEUTENANT GOVERNOR

ELLEN ROY HERZFELDER SECRETARY Tel. (617) 626-1000 Fax. (617) 626-1181 http://www.mass.gov/envir

July 8, 2005

Stuart Dash Community Development Department City of Cambridge 344 Broadway Cambridge, MA 02139

Re: Open Space and Recreation Plan

Dear Mr. Dash:

Thank you for submitting Cambridge's Open Space and Recreation Plan to this office for review for compliance with the current Open Space and Recreation Plan Requirements. I am pleased to write that the plan is approved. This final approval will allow Cambridge to participate in DCS grant rounds through September 2008.

Congratulations on a great job. Please call me at (617) 626-1171 if you have any questions or concerns about the plan.

Sincerely,

Melissa Cryan

Welisse

Urban Self-Help Coordinator

cc:

Board of Selectmen

Parks Department

Conservation Commission